

### MINOR IN ANIMAL BIOLOGY (15 Advanced Credits)

- Level 1** As specified under Core Courses below.  
**Level 2**  
 ZOOL2403 Maintenance Systems in Animals  
 ZOOL2404 Coordination and Control in Animals  
**Level 3**  
 9 advanced level ZOOL credits from the major in Animal Biology syllabus (except ZOOL3410)

### MINOR IN COASTAL ECOSYSTEMS (18 Advanced Credits)

- Level 1** As specified under Core Courses below.  
**Level 2**  
 BIOL2403 Principles of Ecology  
 BIOL2406 Eukaryotic Microbiology  
 BOTN2402 Physiology of Plants  
**Level 3**  
 BIOL3408 Coastal Ecosystems  
 BIOL3409 Caribbean Coral Reefs  
 BOTN3405 Plant Ecophysiology

### MINOR IN PLANT BIOLOGY (15 Advanced Credits)

- Level 1** As specified under Core Courses below.  
**Level 2**  
 BIOL2403 Principles of Ecology  
 BOTN2401 Plant Form and Systematics  
 BOTN2402 Physiology of Plants  
**Level 3**  
 6 credits from the following:  
 BOTN3401 Principles of Plant Biotechnology  
 BOTN3402 Introduction to Plant Breeding \*\*  
 BOTN3403 Fundamentals of Horticulture  
 BOTN3404 Economic Botany  
 BOTN3405 Plant Ecophysiology

### MINOR IN TERRESTRIAL AND FRESHWATER ECOLOGY (15 Advanced Credits)

- Level 1** As specified under Core Courses below.  
**Level 2**  
 BIOL2403 Principles of Ecology  
 BIOL2407 Biological Evolution  
**Level 3**  
 BIOL3400 Issues in Conservation Biology  
 BIOL3406 Freshwater Biology  
 BOTN3406 Tropical Forest Ecology

### CORE COURSES (All Minors)

- Level 1:** A minimum of 24 credits from Level 1, 18 of which must be FST courses and must include:  
 BIOL1017 Cell Biology  
 BIOL1018 Molecular Biology and Genetics  
 BIOL1262 Living Organisms I  
 BIOL1263 Living Organisms II

### POSSIBLE CAREERS IN LIFE SCIENCES



### 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
<b>Total</b>	<b>93 credits</b>

Taken from Faculty of Science and Technology (FST) Regulations and Syllabuses.

For more information:

[www.mona.uwi.edu/lifesciences](http://www.mona.uwi.edu/lifesciences) | [lifesci@uwimona.edu.jm](mailto:lifesci@uwimona.edu.jm)

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THE UNIVERSITY OF THE WEST INDIES  
MONA CAMPUS

## DEPARTMENT OF LIFE SCIENCES



## MAJORS and MINORS 2019-2020

Majors	Minors
Animal Biology	Animal Biology
Horticulture	Coastal Ecosystems
Marine Biology	Plant Biology
Plant Biology	Terrestrial and Freshwater Ecology
Terrestrial and Freshwater Ecology	

## CORE COURSES (For ALL Majors)

### Level 1

A minimum of 24 credits from Level 1, 18 of which must be FST courses and include:

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

### Level 2

BIOL2401	Research Skills and Practices in Biology
BIOL2403	Principles of Ecology

## MAJOR IN ANIMAL BIOLOGY (39 Advanced Credits)

### Level 2

BIOL2164	Principles of Molecular Biology
BIOL2402	Fundamentals of Biometry
BIOL2407	Biological Evolution
ZOOL2403	Maintenance Systems in Animals
ZOOL2404	Coordination and Control in Animals

### Level 3

ZOOL2402	Animal Physiology
ZOOL3403	Entomology
ZOOL3404	Parasitology
ZOOL3405	Vertebrate Biology
ZOOL3410	Advanced Topics in Animal Science

Plus 3 credits from any of the following

BIOL3404	Virology
BIOL3405	Pest Ecology and Management
ZOOL3406	Immunology

## MAJOR IN MARINE BIOLOGY (39 Advanced Credits)

### Level 2

BIOL2402	Fundamentals of Biometry
BIOL2406	Eukaryotic Microbiology
BOTN2401	Plant Form and Systematics
ZOOL2403	Maintenance Systems in Animals
ZOOL2404	Coordination and Control in Animals

### Level 3

BIOL3407	Oceanography
BIOL3408	Coastal Ecosystems
BIOL3409	Caribbean Coral Reefs
ZOOL3408	Sustainable Use of Marine Fishable Resources
ZOOL3409	Aquaculture

Plus 3 credits from any of the following:

BIOL3410	Water Pollution Biology
ZOOL3405	Vertebrate Biology

The following companion courses are strongly recommended:

BIOL2408	Diving for Scientists ( <b>Summer</b> )
BIOL3412	Internship
BIOL3413	Biology Project

## DEPARTMENT OF LIFE SCIENCES, UWI, MONA 2019-2020 UNDERGRADUATE COURSES

### 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

AGSL2401	Management of Soils (not offered 2019/2020)
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 ( <b>Summer</b> )
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

AGBU3008	Internship (4 credits, <b>Summer</b> )
AGBU3012	Project (4 credits)
AGCP3406	Fruit Crop Production (not offered 2019/2020)
AGCP3407	Postharvest Technologies
AGSL3001	Irrigation and Drainage Technology (not offered 2019/2020)
BIOL3400	Issues in Conservation Biology
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 (not offered 2019/2020)
BOTN3403	Fundamentals of Horticulture
BOTN3404	Economic Botany
BOTN3405	Plant Ecophysiology
BOTN3406	Tropical Forest Ecology
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

## MAJOR IN HORTICULTURE

(42 Advanced Credits)

Courses in bold are unique to this major and compulsory.

### Level 2

<b>AGSL2401</b>	<b>Management of Soils</b>
BIOL2164	Principles of Molecular Biology
BIOL2402	Fundamentals of Biometry
BOTN2401	Plant Form and Systematics
BOTN2402	Physiology of Plants

### Level 3 (21 credits chosen from below)

<b>AGBU3008</b>	<b>Internship</b> (4 credits, Summer)
<b>AGBU3012</b>	<b>Project</b> (4 credits)
<b>AGCP3406</b>	<b>Fruit Crop Production</b>
<b>AGCP3407</b>	<b>Postharvest Technologies</b>
<b>AGSL3001</b>	<b>Irrigation and Drainage Technology</b>
BIOL3405	Pest Ecology and Management
BOTN3402	Introduction to Plant Breeding
BOTN3403	Fundamentals of Horticulture

## MAJOR IN PLANT BIOLOGY

(39 Advanced Credits)

### Level 2

BIOL2402	Fundamentals of Biometry
BIOL2164	Principles of Molecular Biology
BOTN2401	Plant Form and Systematics
BOTN2402	Physiology of Plants

### Level 3

BIOL3403	The Biology of Soil
BOTN3402	Introduction to Plant Breeding
BOTN3404	Economic Botany
BOTN3405	Plant Ecophysiology
BOTN3406	Tropical Forest Ecology

Plus 6 credits from any of the following:

BIOL3404	Virology
BIOL3405	Pest Ecology and Management
BOTN3401	Principles of Plant Biotechnology
BOTN3403	Fundamentals of Horticulture

## MAJOR IN TERRESTRIAL AND FRESHWATER ECOLOGY (39 Advanced Credits)

### Level 2

BIOL2402	Fundamentals of Biometry
BIOL2407	Biological Evolution
BOTN2401	Physiology of Plants
ZOOL2403	Maintenance Systems in Animals
ZOOL2404	Coordination and Control in Animals

### Level 3

BIOL3400	Issues in Conservation Biology
BIOL3406	Freshwater Biology
BIOL3410	Water Pollution Biology
BOTN3406	Tropical Forest Ecology

Plus 6 credits from any of the following:

BIOL3403	The Biology of Soil
BIOL3405	Pest Ecology and Management
BOTN3405	Plant Ecophysiology