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 Level 2 | As specified under Core Courses below. |
|--------------------|--|
| BIOL2403 | Principles of Ecology |
| BOTN2401 | Plant Form and Systematics |

Physiology of Plants

Level 3

BOTN2402

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 | |
| Level 3 BIOL3400 | Issues in Conservation Biology |
| | Issues in Conservation Biology Freshwater Biology |

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

Total 93 credits

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

For more Information:

www.mona.uwi.edu/lifesciences | lifesci@uwimona.edu.jm 876-927-2753 / 876-927-1202



THE UNIVERSITY OF THE WEST INDIES MONA CAMPUS

DEPARTMENT OF LIFE SCIENCES



MAJORS and MINORS 2022-2023

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

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

Cell Biology

Level 2 BIOL2401

BIOL1017

Research Skills and Practices in Biology

BIOL2403 Principles of Ecology

MAJOR IN ANIMAL BIOLOGY

(30 Advanced Credits)

| Level 2 | | |
|---|-------------------------------------|--|
| BIOL2164 | Principles of Molecular Biology | |
| BIOL2407 | Biological Evolution | |
| ZOOL2403 | Maintenance Systems in Animals | |
| ZOOL2404 | Coordination and Control in Animals | |
| Level 3 | | |
| ZOOL3403 | Entomology | |
| ZOOL3404 | Parasitology | |
| ZOOL3405 | Vertebrate Biology | |
| Plus 6 credits from any of the following | | |
| BIOL3404 | Virology | |
| BIOL3405 | Pest Ecology and Management | |
| BIOL3413 | Biology Project | |
| ZOOL3063 | Comparative Animal Physiology | |
| ZOOL3406 | Immunology | |
| ZOOL3410 | Advanced Topics in Animal Science | |

MAJOR IN MARINE BIOLOGY

(39 Advanced Credits)

| Level 2 BIOL2164 BIOL2402 BIOL2406 ZOOL2403 ZOOL2404 | Principles of Molecular Biology Fundamentals of Biometry Eukaryotic Microbiology Maintenance Systems in Animals Coordination and Control in Animals |
|---|---|
| Level 3 (Core) BIOL3407 BIOL3408 BIOL3409 | Oceanography Coastal Ecosystems Caribbean Coral Reefs |
| Plus 9 credits fi BIOL2408 BIOL3410 BIOL3412 BIOL3413 ZOOL3405 ZOOL3408 ZOOL3409 | rom the following: Diving for Scientists (Summer) Water Pollution Biology Internship OR Biology Project Vertebrate Biology Sustainable Use of Marine Fishable Resources Aquaculture |

DEPARTMENT OF LIFE SCIENCES, UWI, MONA 2022-2023 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 | |
| | | |
| | | |
| LEVEL 2 | PART II | |
| LEVEL 2 | | |
| BIOL2164 | Principles of Molecular Biology | |
| BIOL2164 BIOL2401 | | |
| BIOL2164 | Principles of Molecular Biology | |
| BIOL2164 BIOL2401 | Principles of Molecular Biology Research Skills and Practices in Biology | |
| BIOL2164 BIOL2401 BIOL2402 | Principles of Molecular Biology Research Skills and Practices in Biology Fundamentals of Biometry | |
| BIOL2164 BIOL2401 BIOL2402 BIOL2403 | Principles of Molecular Biology Research Skills and Practices in Biology Fundamentals of Biometry Principles of Ecology | |
| BIOL2164 BIOL2401 BIOL2402 BIOL2403 BIOL2406 | Principles of Molecular Biology Research Skills and Practices in Biology Fundamentals of Biometry Principles of Ecology Eukaryotic Microbiology | |
| BIOL2164 BIOL2401 BIOL2402 BIOL2403 BIOL2406 BIOL2407 | Principles of Molecular Biology Research Skills and Practices in Biology Fundamentals of Biometry Principles of Ecology Eukaryotic Microbiology Biological Evolution | |
| BIOL2164 BIOL2401 BIOL2402 BIOL2403 BIOL2406 BIOL2407 BIOL2408 | Principles of Molecular Biology Research Skills and Practices in Biology Fundamentals of Biometry Principles of Ecology Eukaryotic Microbiology Biological Evolution Diving for Scientists (Summer) | |

ZOOL2404 Coordination and Control in Animals LEVEL 3 BIOL3400 Issues in Conservation Biology

ZOOL2403 Maintenance Systems in Animals

BIOL3402 Biology of Fungi** The Biology of Soil BIOL3403

BIOL3404 Virology

BIOL3405 Pest Ecology and Management BIOL3406 Freshwater Biology

BIOL3407 Oceanography Coastal Ecosystems BIOL3408 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** ZOOL3063 Comparative Animal Physiology

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 (30 Advanced Credits)

Level 2

| Licy Ci Z | |
|---------------------|-----------------------------------|
| BIOL2164 | Principles of Molecular Biology |
| BIOL2402 | Fundamentals of Biometry |
| BOTN2401 | Plant Form and Systematics |
| BOTN2402 | Physiology of Plants |
| Level 3 (core) | - |
| BIOL3403 | The Biology of Soil |
| BIOL3405 | Pest Ecology and Management |
| BOTN3403 | Fundamentals of Horticulture |
| Plus 6 credits from | the following: |
| BIOL3412 | Internship OR |
| BIOL3413 | Biology Project |
| BOTN3401 | Principles of Plant Biotechnology |
| BOTN3402 | Introduction to Plant Breeding |
| BOTN3404 | Economic Botany |
| BOTN3405 | Plant Ecophysiology |
| BOTN3407 | Post-Harvest Technology** |
| | <i>23</i> |
| | |

MAJOR IN PLANT BIOLOGY (30 Advanced Credits)

| Level 2 | |
|---------------------|-----------------------------------|
| BIOL2164 | Principles of Molecular Biology |
| BIOL2402 | Fundamentals of Biometry |
| BOTN2401 | Plant Form and Systematics |
| BOTN2402 | Physiology of Plants |
| Level 3 (core) | |
| BOTN3401 | Principles of Plant Biotechnology |
| BOTN3404 | Economic Botany |
| BOTN3405 | Plant Ecophysiology |
| Plus 6 credits from | any of the following: |
| BIOL3403 | The Biology of Soil |
| BIOL3404 | Virology |
| BIOL3405 | Pest Ecology and Management |
| BIOL3413 | Biology Project |
| BOTN3402 | Introduction to Plant Breeding |
| BOTN3403 | Fundamentals of Horticulture |
| BOTN3406 | Tropical Forest Ecology |
| | |

MAJOR IN TERRESTRIAL AND FRESHWATER FCOLOGY (39 Advanced Credits)

| ECOLOGI (59 Auvanceu Creuns) | | |
|------------------------------|-------------------------------------|--|
| 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: The Biology of Soil BIOL3403 BIOL3405 Pest Ecology and Management

BOTN3405 Plant Ecophysiology

^{**} Not offered 2022/2023