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)

| As specified under Core Courses below. |
|--|
| |
| Principles of Ecology |
| Eukaryotic Microbiology |
| Physiology of Plants |
| |
| Coastal Ecosystems |
| Caribbean Coral Reefs |
| Plant Eco-Physiology |
| |

MINOR IN PLANT BIOLOGY (15 Advanced Credits)

BOTN3405

| 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 | n the following: |
| BOTN3401 | Principles of Plant Biotechnology |
| BOTN3402 | Plant Breeding |
| BOTN3403 | Fundamentals of Horticulture |
| BOTN3404 | Economic Botany |

Plant Eco-Physiology

MINOR IN TERRESTRIAL AND FRESHWATER ECOLOGY (15 Advanced Credits)

| Level 1 Level 2 | As specified under Core Courses below. |
|--------------------|--|
| 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 whichmust be FST courses and must include:BIOL1017Cell BiologyBIOL1018Molecular Biology and Genetics

BIOL1262Living Organisms IBIOL1263Living Organisms II

BIOLOGY WITH EDUCATION OPTION (63 advanced credits)

Part 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 |
| | |

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

A total of 63 credits from Part II which must include:

| | i cuito in oni i une in which must mendue. | |
|--|--|--|
| BIOL2401 | Research Skills and Practices in Biology | |
| BIOL2402 | Fundamentals of Biometry | |
| BIOL2403 | Principles of Ecology | |
| BIOL2404 | Molecular and Population Genetics | |
| BIOL2406 | Eukaryotic Microbiology | |
| 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. | | |

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 fol-

lowing:

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

For more Information: <u>www.mona.uwi.edu/lifesciences</u> | <u>lifesci@uwimona.edu.jm</u> 927-2753 / 927-1202



THE UNIVERSITY OF THE WEST INDIES MONA CAMPUS

DEPARTMENT OF LIFE SCIENCES



2014-2015 MAJORS, MINORS, OPTION Available for ADVANCED STUDENTS ONLY

| Majors | Minors |
|--|--|
| Animal Biology | Animal Biology |
| Horticulture | Minors Animal Biology Coastal Ecosystems |
| Marine Biology | Plant Biology |
| Plant Biology | Plant Biology Terrestrial and Freshwater Ecology |
| Plant Biology Terrestrial and Freshwater Ecology | Option Biology with |
| | Education |

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 BIOL1018 | Cell Biology 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 **BIOL2402** Fundamentals of Biometry BIOL2404 Molecular and Population Genetics Biological Evolution **BIOL2407** Maintenance Systems in Animals ZOOL2403 ZOOL2404 Coordination and Control in Animals Level 3 ZOOL2402 Animal Physiology (revised for 2014/2015) 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 Eukaryotic Microbiology **BIOL2406** Plant Form and Systematics BOTN2401 ZOOL2403 Maintenance Systems in Animals Coordination and Control in Animals ZOOL2404 Level 3 **BIOL3407** Oceanography **BIOL3408** Coastal Ecosystems Caribbean Coral Reefs BIOL3409 Sustainable Use of Marine Fishable Resources ZOOL3408 ZOOL3409 Aquaculture Plus 3 credits from any of the following: BIOL3410 Water Pollution Biology Vertebrate Biology ZOOL3405 The following companion courses are strongly recommended: Diving for Scientists (Summer) BIOL2408 BIOL3412 Internship BIOL3413 **Biology Project**

DEPARTMENT OF LIFE SCIENCES, UWI, MONA 2014-2015 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

| PARTII | |
|----------|--|
| LEVEL 2 | |
| AGSL2401 | Soil and Water Management |
| BIOL2401 | Research skills and practices in Biology |
| BIOL2402 | Fundamentals of Biometry |
| BIOL2403 | Principles of Ecology |
| BIOL2404 | Molecular and Population Genetics |
| 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 | |
| | A minute Internation (A ana dita Summer) |
| AGBU3008 | Agriculture Internship (4 credits, Summer) |
| AGBU3012 | Research Project (4 credits) |
| AGCP3406 | Fruit and Crop Production |
| AGCP3407 | Post-Harvest Technologies |
| AGSL3001 | Irrigation and Drainage Techniques |
| BIOL3400 | Issues in Conservation Biology |
| BIOL3403 | The Biology of Soil |
| BIOL3404 | Principles of 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 | Plant Breeding |
| BOTN3403 | Fundamentals of Horticulture |
| BOTN3404 | Economic Botany |
| BOTN3405 | Plant Eco-Physiology |
| 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.

| Management of Soils |
|--|
| Fundamentals of Biometry |
| Molecular and Population Genetics |
| Plant Form and Systematics |
| Physiology of Plants |
| s chosen from below) |
| Agriculture Internship (4 credits, Summer) |
| Research Project (4 credits) |
| Fruit and Crop Production |
| Post-Harvest Technologies |
| Irrigation and Drainage Techniques |
| Pest Ecology and Management |
| Plant Breeding |
| Fundamentals of Horticulture |
| |

MAJOR IN PLANT BIOLOGY (39 Advanced Credits)

| Level 2 | |
|---------------------|-----------------------------------|
| BIOL2402 | Fundamentals of Biometry |
| BIOL2404 | Molecular and Population Genetics |
| BOTN2401 | Plant Form and Systematics |
| BOTN2402 | Physiology of Plants |
| Level 3 | |
| BIOL3403 | The Biology of Soil |
| BOTN3402 | Plant Breeding |
| BOTN3404 | Economic Botany |
| BOTN3405 | Plant Eco-Physiology |
| 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 |
| ZOOL3403 | Entomology |
| Plus 3 credits from any of the following: | |
| BIOL3403 | The Biology of Soil |
| BIOL3405 | Pest Ecology and Management |
| BOTN3405 | Plant Eco-Physiology |
| | |