

Dr. Sherene James-Williamson  
Lecturer/Museum Curator

# DEPARTMENT OF GEOGRAPHY AND GEOLOGY



# THE De La BECHE BUILDING



# UNITS AND CENTRES

- Earthquake Unit
- Geology Museum
- Marine Geology Unit
- Unit For Disaster Studies
- Map Library & Reading Room



# What is Geology?

Geology is the science and study of the Earth, its composition, structure, physical properties, history, and the processes that shape it. Geologists study the physical structure and processes of the Earth. Geologists work to understand the history of our planet.

# What is Geography?

Geography is the study of the earth's landscapes, peoples, places and environments. Geography is unique in bridging the gap between the social sciences (human geography) and the natural sciences (physical geography).

# ACADEMIC PROGRAMMES

## UNDERGRADUATE

The Department currently offers

- Bachelor of Science Majors and Minors in Geography and Geology and
- BA in Geography

# ACADEMIC PROGRAMMES POSTGRADUATE

The Department currently offers

- MPhil & PhD in Geography
- MPhil & PhD in Geology



# Why Geography and Geology





# GEOGRAPHY COURSES

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**Introduction to Human &  
Physical Geography**

**Geographies of Tourism**

Urban Geography

Geomorphic Processes and  
Landforms

Geosphere and Hydrosphere

Climate Change: Concepts,  
Causes and Issues

Geography and Development

Urban and Regional Planning

Atmosphere and Biosphere

Introduction to GIS and Remote  
Sensing

Geographical Thought and  
Research Methods

Disaster Management

Geography of the Caribbean

Tropical Agricultural Systems and  
Development

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# GEOLOGY COURSES

**Introduction to Earth Sciences**

**Field Geology**

Palaeontology

Caribbean Geology

Sedimentology

Hydrogeology

Igneous Petrology & Metamorphic  
Petrology

Marine Geology & Applied  
Geophysics

Structural Geology and Geological  
Mapping

Applied Sedimentology &  
Petroleum Geology

Engineering Geology

Introduction to GIS and Remote  
Sensing

# ENTRY REQUIREMENTS

## Geography

- Faculty requirements plus CXC Geography.

# ENTRY REQUIREMENTS

## Geology

Faculty requirements

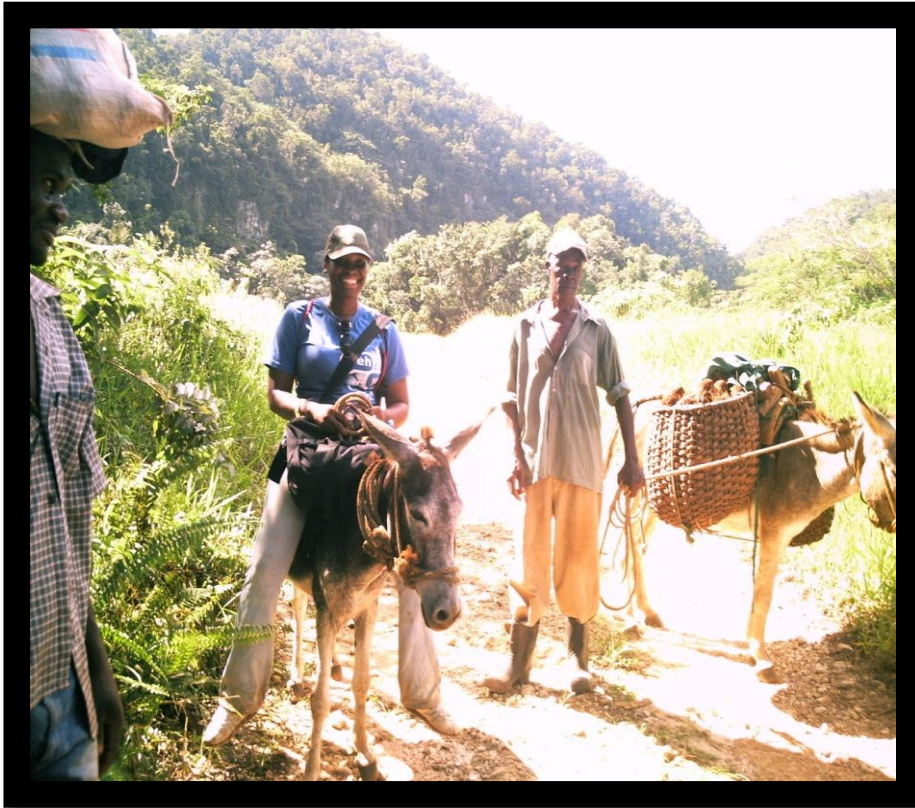
# ENTRY REQUIREMENTS

## Geography & Geology

Saturdays and/or Sundays.

All fieldwork in Geography and Geology is Mandatory.

# Field Trips, Field Work and Field Classes



A student takes a ride on a Donkey during a Tropical Agriculture Field Trip.

Field trips and field work are an active and integral part of the work and study of the department.

They are both educational and fun! It allows students and lecturers to have experiences with the local community and relate theory taught in classes to real-life situations.



# YEAR 1 – SEMESTER 1

# GEOLOGY

<b>GEO1101</b>	<b>Earth Science I: Earth Materials &amp; Plate Tectonics</b>	<b>3 credits</b>	<b>Week 1-6</b>
<b>GEO1102</b>	<b>Earth Science II: Earth Processes &amp; Earth History</b>	<b>3 credits</b>	<b>Week 7-12</b>



- **GEOL1101- Earth Science 1:**  
**Earth Materials and Plate Tectonics**  
**3 credits – 1<sup>st</sup> 6 weeks**  
**18 hrs lectures; 24 hrs practical; 6 hrs tutorial;**  
**1 field trip**  
**Tectonics, Earthquakes, Volcanoes, Minerals & Rocks**
- **GEOL1102- Earth Science 2:**  
**Earth Processes and Earth History**  
**3 credits – 2<sup>nd</sup> 6 weeks**  
**18 hrs lectures; 24 hrs practical; 6 hrs tutorial;**  
**1 field trip**  
**The History of the Earth and Life, Surface Processes**






# YEAR 1 – SEMESTER 2

# GEOLOGY

<b>GEOL1103</b>	<b>Earth Science III: Minerals &amp; Mineral Deposits</b>	<b>3 Credits</b>	<b>Semester 2</b>	<b>Week 1-6</b>
<b>GEOL1104</b>	<b>Earth Science IV: Geological Maps &amp; Environmental Geology</b>	<b>3 Credits</b>	<b>Semester 2</b>	<b>Week 7-12</b>




- GEOL1103- Earth Science 3:  
Minerals and Mineral Deposits  
3 credits – 1<sup>st</sup> 6 weeks  
18 hrs lectures; 24 hrs practical; 9 hrs tutorial;  
Minerals and Gemstones, Mineral Optics,  
Economic Mineral Deposits
- GEOL1104- Earth Science 4:  
Geological maps and Environmental Geology  
3 credits – 2<sup>nd</sup> 6 weeks  
18 hrs lectures; 24 hrs practical; 6 hrs tutorial;  
1 field trip  
Petroleum Geology & Energy Resources,  
Geology of the Environment, Geologic Maps



# YEAR 1 – SEMESTER 1

# GEOGRAPHY

<b>GEOG1131</b>	<b>Human Geography I: Population, Migration &amp; Human Settlement</b>	<b>3 credits</b>	<b>Week 1-12</b>
<b>GEOG1231</b>	<b>Earth Environments I: Geomorphology &amp; Soils</b>	<b>3 credits</b>	<b>Week 1-12</b>



# YEAR 1 – SEMESTER 2

## GEOGRAPHY

<b>GEOG1132</b>	<b>Human Geography II: World Economy, Agriculture &amp; Food</b>	<b>3 credits</b>	<b>Week 1-12</b>
<b>GEOG1232</b>	<b>Earth Environments II: Climate &amp; the Biosphere</b>	<b>3 credits</b>	<b>Week 1-12</b>

# Geographic Information Systems (GIS)

The students, lecturers and researchers at the Department of Geography and Geology, utilize GIS in various aspects of their work.

A GIS helps you answer questions and solve problems by looking at your data in a way that is quickly understood and easily shared.

GIS technology can be integrated into any enterprise information system framework.

GIS allows us to view, understand, question, interpret, and visualize data in many ways that reveal relationships, patterns, and trends in the form of maps, globes, reports, and charts.



Students in the field using GPS units to collect data for GIS projects.

# CAREERS IN GEOGRAPHY

❖ Urban/Population Geography    ❖ Climatology

❖ Urban and Regional Planning    ❖ Hydrology

❖ Geomorphology    ❖ Disaster Management

❖ Economic Geography    ❖ Teacher/Lecturer/Researcher

❖ Cultural Geography    ❖ Environmental Consultants

❖ Biogeography    ❖ GIS Analyst

# CAREERS IN GEOLOGY

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❖ Palaeontology

❖ Geomorphology

❖ Volcanology

❖ Planetary Geology

❖ Seismology

❖ Marine Geology

❖ Hydrology/Hydrogeology

❖ Disaster Management

❖ Mineralogy

❖ Teacher/Lecturer/Researcher

❖ Sedimentology

❖ Museum Curators

❖ Petroleum/Exploration  
Geology

❖ Environmental Consultants

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# WHERE DO GEOGRAPHERS AND GEOLOGISTS WORK

- Industry – Petroleum/Energy/Mining
- Environmental Agencies
- Entrepreneurs/Consultants
- Government Ministries/Agencies
- Research Centres
- Specialized Laboratories
- Museums
- Universities/Colleges/Schools