Certificate Level

**ENVS 1200**  
*Fundamentals of Environmental Sciences*

- **Credit Hours**: 3  
- **Contact Hours**: 4  
- **Pre-requisites**: 0  
- **Type of Course**: Departmental Requirement  
- **Passing Grade**: C-

**Course Description**:
This course will give the student general introduction to fundamentals of environmental sciences and addresses relationships among ecological resources in the ecosystems. The course also discusses human impact on the natural resources and the way to approach our ecosystems sustainably.

Diploma Level

**ENVS 2101**  
*Principles of Environmental Sciences*

- **Credit Hours**: 3  
- **Contact Hours**: 4  
- **Pre-requisites**: ENVS 1200  
- **Type of Course**: Specialization Course:  
- **Passing Grade**: C

**Course Description**:
This course introduces the concepts and principles of environmental sciences and provides basic background in some important environmental issues to enable a proper understanding of how people can live sustainably on their environment. This prepares the students to the higher courses in applied environmental science.
ENVS 2201
Introduction to Environmental Policy and Implementation

Credit Hours : 3
Contact Hours : 3
Pre-requisites : ENVS 2101
Type of Course: Specialization Course
Passing Grade: C

Course Description:
Policy system and implementation on the management of human activities that reduce or mitigate harmful effects on nature and natural resources.

ENVS 2202
Pollution Sources and Control I

Credit Hours: 3
Contact Hours: 4
Pre-requisites: ENVS 2101
Type of Course: Specialization Course
Passing Grade: C

Course Description
This course intends to provide general understanding of pollution and the role of man in damaging the environment. The course will emphasize on sources of air, water, soil, noise and electromagnetic field pollutions, and methods of controlling or minimizing these types of pollution.

ENVS 2203
Field Study and Laboratory Techniques in Environmental Sciences

Credit Hours 3
Contact Hours 6
Pre-requisites LABT 1201
Type of Course Specialization Course
Passing Grade: C

Course Description
Collection of samples and other data gathering techniques done in the field and in the laboratory for Environmental Science researches.
### ENVS 2204 / ENVS 2301

**Project IA**

**Project IB**

<table>
<thead>
<tr>
<th>Credit Hour</th>
<th>3 / 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Hours</td>
<td>6 / 6</td>
</tr>
<tr>
<td>Pre-requisites</td>
<td>ENVS 2101, LABT 1201 / ENVS 2204</td>
</tr>
<tr>
<td>Co-Requisite</td>
<td>ENVS 2203</td>
</tr>
</tbody>
</table>

**Type of Course**: Specialization Course

**Passing Grade**: C

**Course Description**:

An introductory course in environmental sciences research. Basic concepts of research in applied science will be discussed giving emphasis on the parts of a research proposal and a research paper.

### Higher Diploma Level

#### ENVS 3101

**Biodiversity and Nature Conservation**

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Hours</td>
<td>4</td>
</tr>
<tr>
<td>Pre-requisites</td>
<td>ENVS 2101</td>
</tr>
</tbody>
</table>

**Type of Course**: Specialization Course

**Passing Grade**: C

**Course Description**:

This course introduces the role and importance of biodiversity and natural resources, describes different approaches to conserve natural ecosystems and reviews some of the challenges associated with implementing conservation.

#### ENVS 3102

**Environmental Toxicology**

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Hours</td>
<td>4</td>
</tr>
<tr>
<td>Pre-requisites</td>
<td>ENVS 2101</td>
</tr>
</tbody>
</table>

**Type of Course**: Specialization Course

**Passing Grade**: C

**Course Description**:
### ENVS 3103
**Hazardous Waste Management**

| Credit Hours | 3 |
| Contact Hours | 4 |
| Pre-requisites | ENVS 2202 |
| Type of Course | Specialization Course |
| Passing Grade | C |

**Course Description:**

The course introduces some management practices in handling, treating and disposing hazardous wastes.

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### ENVS 3104
**Chemistry of the Environment**

| Credit Hours | 3 |
| Contact Hours | 4 |
| Pre-requisites | CHEM 2104, CHEM 2201 |
| Type of Course | Specialization Course |
| Passing Grade | C |

**Course Description:**

The course introduces the students to the principles of Chemistry which are very useful and linked to the study of Environmental Sciences. It develops in the students the appreciation of the application of general chemical principles to improve and preserve the quality of the environment, understand the methods of transport and accumulation of metals and organic compounds in the environment, describe analytical techniques for the assessment of chemical substances in the environment.

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### ENVS 3201
**Environmental Impact Assessment and Compliance Inspection**

| Credit Hours | 3 |
| Contact Hours | 4 |
| Pre-requisites | ENVS 3103 |
| Type of Course | Specialization Course |
| Passing Grade | C |

**Course Description:**

This course introduces some important procedures and processes of environmental impact assessment and monitoring of compliance.
ENVS 3202
Ecotourism Management

Credit Hours : 3
Contact Hours : 4
Pre-requisites : 0
Type of Course : Specialization Course
Passing Grade : C

Course Description :
Concept, theory, history, terminology and practices in ecotourism planning and management

ENVS 3203
Freshwater Ecology

Credit Hours : 3
Contact Hours : 4
Pre-requisites : ENVS 2101
Type of Course : Specialization Course
Passing Grade : C

Course Description :
Discovering the richness and diversity of the freshwater ecosystem as a unique and important part and parcel of the earth. How to protect the freshwater ecosystem and its biodiversity are included in the discussion

Baccalaureate Level

ENVS 4101
Marine Ecology and Coastal Restoration

Credit Hours : 3
Contact Hours : 4
Pre-requisites : ENVS 2101
Type of Course : Specialization Course
Passing Grade : C

Course Description :
Discovering the richness and diversity of the marine environment as a unique and important part of life on earth. Coastal restoration will also be included
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Contact Hours</th>
<th>Pre-requisites</th>
<th>Type of Course</th>
<th>Passing Grade</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 4102</td>
<td>Bio-Safety</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>Specialization Course</td>
<td>C</td>
<td>Research, collection, and ethics on the utilization of biological and genetic resources; observance in the elimination of potential risks from biotechnology and its products.</td>
</tr>
<tr>
<td>ENVS 4103</td>
<td>Waste Water Management</td>
<td>3</td>
<td>4</td>
<td>ENVS 3104</td>
<td>Specialization Course</td>
<td>C</td>
<td>Principles and practices in managing domestic and industrial wastewater</td>
</tr>
<tr>
<td>ENVS 4104</td>
<td>Pollution Sources and Control II</td>
<td>3</td>
<td>4</td>
<td>ENVS 2202</td>
<td>Specialization Course</td>
<td>C</td>
<td>This course intends to provide advance topics in environmental pollution and the methods of minimizing and controlling major classes of environmental pollutants.</td>
</tr>
</tbody>
</table>
**ENVS 4201**  
Environmental Monitoring System and Data Analysis

| Credit Hours | 3 |
| Contact Hours | 3 |
| Pre-requisites | ENVS 3102 |
| Type of Course | Specialization Course |
| Passing Grade | C |

**Course Description:**

Monitoring systems for environmental contaminants; assessing consequences on natural resource management and pollution risks; and application of bioremediation technologies.

The course is also designed to enable the students how to conceptualize a problem, acquire, process, analyze and properly interpret environmental data generated.

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**ENVS 4202**  
Remote Sensing

| Credit Hours | 3 |
| Contact Hours | 4 |
| Pre-requisites | 0 |
| Type of Course | Specialization Course |
| Passing Grade | C |

**Course Description:**

Introduction to remote sensing and geographical information system as they are applied for explaining events, predicting outcomes, and planning strategies in managing the environment.

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**ENVS 4203**  
Disaster Management

| Credit Hours | 3 |
| Contact Hours | 4 |
| Pre-requisites | 0 |
| Type of Course | Specialization Course |
| Passing Grade | C |

**Course Description:**

Understanding how natural and man-made disasters happen, their consequences and approaches in managing them.
ENVS 4204
Environmental Advocacy and Awareness

Credit Hours : 3
Contact Hours : 3
Pre-requisites : ENVS 2201
Type of Course : Specialization Course
Passing Grade : C

Course Description :
Approaches in creating public awareness on the importance of environmental conservation; planning and implementing environmental advocacy programs.

ENVS 4205 / ENVS 4301

Project IIA

Project IIB

Credit Hours : 3 / 3
Contact Hours : 6 / 6
Pre-requisites : ENVS 2301 / ENVS 4205
Type of Course : Specialization Course
Passing Grade : C

Course Description :
Addressing urgent global environmental problems such as global warming, ozone depletion, cyclones and desertification by conducting and presenting experimental research and current issues in environmental science.