



NATIONAL OPEN UNIVERSITY OF NIGERIA

BIO 217



General Microbiology Course Guide

BIO 308 (Biogeography)

Course Guide

Course Developer/Writer

Dr. Kelechi L. Njoku, National Open University of Nigeria

Programme Leader

Professor A. Adebajo, National Open University of Nigeria

Course Coordinator

Abiodun E. Adams, National Open University of Nigeria

Credits of cover-photo: Henry Ude, National Open University of Nigeria

National Open University of Nigeria - 191, Cadastral Zone, Nnamdi Azikiwe Express Way, Jabi, Abuja, Nigeria



www.nou.edu.ngcentralinfo@nou.edu.ng
oer.nou.edu.ngoerunit@nou.edu.ng OER repository

Published in 2013, 2015, 2021 by the National Open University of Nigeria

© National Open University of Nigeria 2021



This publication is made available in Open Access under the [Attribution-ShareAlike4.0 \(CC-BY-SA 4.0\) license](https://creativecommons.org/licenses/by-sa/4.0/). By using the content of this publication, the users accept to be bound by the terms of use of the Open Educational Resources repository oer.nou.edu.ng of the National Open University of Nigeria.

The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of National Open University of Nigeria concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The ideas and opinions expressed in this publication are those of the authors; they are not necessarily those of National Open University of Nigeria and do not commit the organization.

How to re-use and attribute this content

Under this license, any user of this textbook or the textbook contents herein must provide proper attribution as follows: “First produced by the National Open University of Nigeria” and include the NOUN Logo and the cover of the publication. The repository has a version of the course available in ODT-format for re-use.

If you use this course material as a bibliographic reference, then you should cite it as follows: BIO 308: Biogeography, Course Guide, National Open University of Nigeria, 2015 at oer.nou.edu.ng

If you redistribute this textbook in a print format, in whole or part, then you must include the information in this section and give on every physical page the following attribution: Downloaded for free as an Open Educational Resource at oer.nou.edu.ng If you electronically redistribute part of this textbook, in whole or part, then you must retain in every digital file (including but not limited to EPUB, PDF, ODT and HTML) the following attribution:

Downloaded for free from the National Open University of Nigeria (NOUN) Open Educational Resources repository at oer.nou.edu.ng

Introduction

BIO 308: Biogeography is a one-semester, 2- credit units' course in Biology. It is a 300 level, second semester undergraduate course offered to students admitted in the School of Science and Technology and School of Education who are offering Biology or related programmes.

The course guide tells you briefly what the course is all about, what course materials you will be using and how you can work your way through these materials. It gives you some guidance on your tutor- marked assignments.

There are self-assessment exercises within the body of a unit and/or at the end of each unit. The exercise(s) is/are an overview of the unit to help you assess yourself at the end of every unit.

What you will Learn in this Course

This course contains 15 units which cover a generalised survey of the plant and animal kingdom based mainly in the study of similarities and differences in the external features, ecological adaptation of plant and animal forms.

Plants and animals consist of different forms: from the simple forms to the complex forms. At the end of this course, you would have acquainted yourself of the different forms of the plant and animal kingdom, especially their external features and ecological adaptation.

Course Aims

The aim of this course is to provide a generalised survey of the floristic and zoogeographic regions of the world with reference to tropical and temperate flora based mainly on the study of the similarities and differences in the dispersal and colonisation of land by plants and animals ecological adaptations of plants and animals forms.

Course Objectives

In addition to the aim of this course, the course sets an overall objective which must be achieved. In addition to the course objectives, each of the units has its own specific objectives. You are advised to read properly the specific objectives for each unit at the beginning of that unit. This will help you to ensure that you achieve the objectives. As you go through each unit, you should from time to time go back to these objectives to ascertain the level at which you have progressed.

By the time you have finished going through this course, you should be able to:

- explain the different floristic and zoogeographic regions of the world
- compare tropical and temperate flora
- recognise the patterns of dispersal and colonisation of land by plants and animals
- describe the island biogeography

- recognize relationships between vegetation, soil types and climate and relationship between plant distribution and world fauna.

Working through this Course

In this course, you are advised to devote your time in reading through the material. You would be required to do all that has been stipulated in the course: study the course units, read the recommended reference textbooks and do all the unit(s) self-assessment exercise(s) and at some points, you are required to submit your assignment (TMAs) for assessment purpose. You should therefore avail yourself of the opportunity of being present during the tutorial sessions so that you would be able to compare knowledge with your colleagues.

Course Materials

You are to be provided with the two major course materials. These are:

1. Course Guide
2. Study Units

The course comes with a list of recommended textbooks. These textbooks are supplement to the course materials so that you can avail yourself of reading further. Therefore, it is advisable you acquire some of these textbooks and read them to broaden your scope of understanding.

Study Units

This course is divided into 3 modules broken into 15 study units, as follows:

Module 1

- Unit 1 Fundamentals of Biogeography and Ecosystem
- Unit 2 Tropical and Temperate Flora and Fauna
- Unit 3 Classifications and Types of Biogeography
- Unit 4 Floristic Regions of the World
- Unit 5 Holarctic Kingdom

Module 2

- Unit 1 Paleotropical Kingdom
- Unit 2 Neotropical Kingdom
- Unit 3 South African Kingdom
- Unit 4 Antarctic Kingdom
- Unit 5 Zoogeography

Module 3

- Unit 1 Zoogeographical Provinces
- Unit 2 Island Biogeography
- Unit 3 Relationship between Vegetation and Climate
- Unit 4 Relationship between Soil Type and Vegetation

Textbooks and References

You will find some recommended textbooks for this course. You may wish to purchase them or any other textbook that you may find useful for the course.

Assessment

There are two aspects of assessment in this course; the tutor marked assignments and the written examination/end of course examination.

You are advised to be sincere in working on the exercise. In tackling the assignments, you are expected to apply information, knowledge and techniques gathered during the course. The assignments must be submitted to your tutor/facilitator for formal assessment in accordance with the deadlines stated in the presentation schedule and the assignment file. The work you submit to your tutor for assessment will count for 30% of your total course work. At the end of the course you will need to sit for a final or end of course examination of about three hours duration. This examination will count for 70% of your total course mark.

Final Examination and Grading

The end of course examination has a value of 70% of the total course guide. The examination will consist of questions, which will reflect the type of self-testing exercise and tutor-marked assignment problems you have previously encountered. All areas of the course will be assessed.

After going through the whole units, you are advised to do revision before sitting for the examination. You will find it useful to review your self-test, TMAs and comments on them before the examination from all parts of the course.

Course Marking Scheme

Assessment	Marks
Assignments 1 – 4	Four assignments, best three marks of the four count at 10% each – 30% of Course marks
End of course examination	70% of overall course marks
Total	100% of course materials

Presentation Schedule

Your course materials have important dates for the early and timely completion and submission of your TMAs and attending tutorials. You should remember that you are required to submit all your assignments by the stipulated time and date. You should guard against falling behind in your work or studies.

Self-Assessment Exercise

The SAEs is a continuous assessment component of your course. It accounts for 30% of the total score. You will be given four (4) SAEs to answer. Three of these must be answered before you are allowed to sit for the end of course examination. The SAEs would be given to you by your facilitator and returned after you have done the assignment as of before.

BIO 308 Course Guide

Now SAEs questions are through an electronic system known as E- SAEs. These comprise of eighty (80) questions. SAE 1, 2, 3 and 4 comprise twenty (20) questions each respective fully.

Assignment questions for the units in this course are contained in the assignment file. You will be able to complete your assignment from the information and material contained in your reading, references and study units. However, it is desirable in all degree level to demonstrate that you have read and researched more into your references, which will give you a wider view point and may provide a deeper understanding of the subject.

Make sure that each assignment reaches your facilitator on or before the deadline given in the presentation schedule and assignment file. If for any reason you cannot complete your work on time, contact your facilitator before the assignment is due to discuss the possibility of an extension. Extension will not be granted after the due date unless there are exceptional circumstances.

Facilitators/Tutors and Tutorials

There are hours of tutorials provided in support of this course. You will be notified of the dates, time and location of these tutorials as well as the names and phone number of your facilitator, as soon as you are located a tutorial group.

Your tutor/facilitator will mark and comment on your assignments, keep a close watch on your progress on any difficulties you might face and provide assistance to you during the course. You mail your tutorial marked assignment to your facilitator before the scheduled date (at least two working days are required.). They will be marked by your tutor and returned to you as soon as possible. With e- examination, it is no more applicable.

Do not delay to contact your facilitator by telephone, e-mail and discuss problems if you need assistance.

The following might be circumstances in which you would find assistance necessary. Contact your facilitator if you:

- do not understand any part of the study units or the assigned readings
- have difficulty with the self-test or exercises
- have a question or problem with an assignment or with the grading of an assignment.

You should endeavour to attend the tutorials. This is the only chance to have face to face contact with your course facilitator and to ask questions which are answered instantly. You can raise any problem encountered in the course of your study.

To gain much benefit from course tutorials, prepare a question list before attending them. You will learn a lot from participating in active discussion.

Summary

This course guide is designed to furnish you with the information you need for a fruitful experience in the course. But, how much you will get from the course will ultimately depend on what you put in. You have to invest your time, effort and plan well to get the best out of this course and others that you will study this semester.

BIO 308 Course Guide

I wish you success in the course and hope that you will find it both interesting and useful.