



# جامعة الحكمة إلورن نيجيريا

**AL-HIKMAH UNIVERSITY, ILORIN- NIGERIA**

**Adeta Road, Adewole Housing Estate, P.M.B.1601, Ilorin**  
**F0ACULTY OF NATURAL AND APPLIED SCIENCES**  
**DEPARTMENT OF CHEMICAL AND GEOLOGICAL SCIENCES**  
**B.SC GEOLOGY PROGRAMME**  
**2019/2020 ACADEMIC SESSION**  
**COURSE OUTLINE FOR:**

**COURSE CODE: GEM 206**

**COURSE TITLE: ELEMENTARY SURVEY**

**2 CREDIT UNITS: 12 LECTURE PERIODS (MONDAYS: 08AM - 10AM)**

**PRACTICAL CLASSES TO HOLD PERIODICALLY BEHIND THE LAB COMPLEX**

**COURSE LECTURER: DR. I. A. OKUNLOLA, 08033139881, iaokunlola@alhikmah.edu.ng**

<b>Week</b>	<b>Date</b>	<b>Topics</b>	<b>Highlights</b>
1.	24.02.2020	Introduction to surveying	What is surveying? Definition Of Surveying, Categories of surveying, Classification of Surveying
2.	02.03.2020	Field Practical No.1	Parts of Compass-Clinometer. How to determine the bearing of a given object or direction with Compass
	09.03.2020	Continuous Assessment No. 1 and Term Paper Assignment	
3.	09.03.2020	Measuring horizontal distances	The survey process, Methods of determining horizontal distances, Principle of compass surveying, Equipment for Surveying,
	16.03.2020	Submission of Term Paper Assignment	
4.	16.03.2020	Field Practical No.1 Continues	How to determine the bearing of a given value from a pre-determined point
5.	23.03.2020	Continuous Assessment No. 2	
	23.03.2020	Field Practical No.2	Methods of measuring horizontal distances
6.	30.03.2020	Levelling	Methods of obtaining differences in height. Errors in levelling

	06.04.2020	Continuous Assessment No. 3	
7.	06.04.2020	Global Positioning System (GPS)	Introduction of GPS, Description of the GPS, Principle of GPS, Advantages and disadvantages of GPS
	13.04.2020	Field Practical No.3	Drawing of the sketch map of an isolated position e.g. borehole point, trial pit point, mines spot etc.
8.	20.04.2020	Continuous Assessment No. 4	
	20.04.2020	Use of Protractor	Transferring Bearing/Direction with protractor
9.	27.04.2020	Practical No. 4 (Part 1)	Field gridding using optical square
10.	02.05.2020	Field data collection on surveying	Surveying of 5km stretch of linear area around Adeta University campus in groups
11.	04.05.2020	Practical No. 4 (Part 2)	Field gridding using compass-clinometer
12.	11.05.2020	Evaluation of collected survey data	Survey map production. Scaling. Legend