

جامعة الحكمة إلورن نيجيريا

AL-HIKMAH UNIVERSITY, ILORIN - NIGERIA

Adeta Road, Adewole Housing Estate, P.M.B.1601, Ilorin
FACULTY 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 102

COURSE TITLE: INTRODUCTION TO GEOLOGY II

2 CREDIT UNITS: 12 LECTURE PERIODS (TUESDAYS 2 - 4PM) PRACTICAL CLASSES TO BE ANNOUNCED PERIODICALLY

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

| Week | Date | Topic | Highlights |
|------|------------|--|---|
| 1. | 24/2/2020 | Continental Drift, Sea floor, Spreading Plate | Definition of plate tectonic. Tectonic theories, Earth's magnetic field and paleomagnetism |
| | | Tectonics (Part 1) | Latti s magnetic field and paleomagnetism |
| 2. | 02/03/2020 | Continental Drift, Sea | Curie temperature, Changing earth's magnetic pole, Sea floor spreading, |
| | | floor, Spreading Plate Tectonics (Part 2) | pole, Sea 11001 spreading, |
| 3. | 09/03/2020 | Continental Drift, Sea floor, Spreading Plate | Plate tectonic, Types of plate boundaries, Hotspots and plate velocities |
| | | Tectonics (Part 3) | and plate velocities |
| | 16/03/2020 | Continuous Assessment No. 1 | |
| 4. | 16/03/2020 | Geologic Time (Part 1) | Concept of relative age and numeric age, Principle |
| | | | of stratigraphy, Unconformities, Stratigraphic formation and their correlation |
| 5. | 23/03/2020 | Geologic Time (Part 2) | Geologic column, Numeric age |
| | 30/03/2020 | 30/03/2020 Continuous Assessment No. 2 and Term Paper Assignment | |
| 6. | 30/03/2020 | Oceans and coasts (Part | Oceans and salient facts ocean sea floor oceanic, |
| | | 1) | Oceanic Islands and seamounts passive and active |

| | | | continental margins, Ocean water, Ocean circulation and tides, Ocean waves, Waves erosion |
|-----|------------|-------------------------------------|--|
| | 06/04/2020 | Submission of Term Paper Assignment | |
| 7. | 06/04/2020 | Oceans and coasts (Part 2) | Wave refraction Coastal sediment transport Coastal deposits and land forms Depositional features along coasts, Coastal variability, Coastal Problems, Protection from shoreline erosion |
| | 13/04/2020 | Continuous Assessment No. 3 | |
| 8. | 13/04/2020 | Deserts (Part 1) | Origin and type of deserts, Surface processes in deserts wind erosion and deposition, Sediment transportation by wind deposits, |
| 9. | 20/04/2020 | Deserts (Part 2) | Wind deposits, Sand dunes, Dust in ocean sediments, Desertification |
| 10. | 27/04/2020 | Continuous Assessment No. 4 | |
| 11. | 04/05/2020 | Our changing planet (Part 1) | Earth's complex system, Awareness of impact on environments, Solar radiation and the atmosphere, Trace gases, Breakdown of ozone layer, Greenhouse gases, Carbon dioxide in the atmosphere |
| | 11/05/2020 | Continuous Assessment No. 5 | |
| 12. | 11/05/2020 | Our changing planet (Part 2) | Volcanic effects on changing atmosphere and atmospheric temperature, Paleoclimatology, Eocene global climate change, Effects of global warming. |