Course Synopsis: GNS 103 – History and Philosophy of Science

Lagos State University  
General Studies Unit  
100 Level – Second Semester  
Credit Units: 2

# Course Description / Synopsis:

This course introduces students to the historical development and philosophical foundations of science. It examines the origin, evolution, and societal impact of scientific knowledge and technological advancement. The course also explores the nature of scientific inquiry, the relationship between science and culture, and the ethical issues arising from scientific discoveries. Emphasis is placed on understanding science as a human activity influenced by historical, philosophical, and cultural contexts.

# Course Objectives:

* Understand the historical development of science and technology.
* Explore the philosophical underpinnings of scientific inquiry.
* Analyze the role of science in societal development and change.
* Discuss ethical issues in science and technology.
* Evaluate the influence of culture and politics on scientific progress.

# Course Outline / Topics:

1. Introduction to History and Philosophy of Science

* Definition and scope of science
* Science as a body of knowledge and method of inquiry

1. Historical Development of Science

* Scientific achievements of ancient civilizations (Egypt, Mesopotamia, Greece)
* Scientific revolution and modern science

1. Philosophical Foundations of Science

* Empiricism and rationalism
* Inductive and deductive reasoning
* Scientific methods and paradigms

1. Science, Technology and Society

* Science in the industrial and digital age
* Impact of technology on society and environment

1. Ethics in Science and Technology

* Ethical issues in scientific research
* Responsibility of scientists to society

# Teaching Methods:

* Lectures and interactive discussions
* Case studies and group presentations
* Multimedia presentations on scientific milestones

# Assessment Methods:

Continuous Assessment: 30%  
- Assignments  
- Presentations  
- Class participation

Final Examination: 70%