**Lecture 1: An Introduction to Social and Human Sciences**

**1. Basic Definitions**

**1.1. What is Science?**

The word “science” is derived from the Latin word *Scientia,* meaning knowledge. To some people, science refers to difficult high school or college-level courses such as physics, chemistry, and biology meant only for the brightest students. To others, science is a craft practised by scientists in white coats using specialized equipment in their laboratories.

However, **Science** refers to a systematic and organized body of knowledge **in any area of inquiry** that is acquired using “the scientific method”. The latter refers **to a standardized set of techniques for building scientific knowledge, such as how to make valid observations, how to interpret results, and how to generalize those results.** The scientific method allows researchers to independently and impartially test pre-existing theories and prior findings, and subject them to open debate, modifications, or enhancements. The scientific method must satisfy **four key characteristics**:

* ***Logical:*** Scientific inferences must be based on logical principles of reasoning.
* ***Confirmable:*** Inferences derived must match with observed evidence.
* ***Repeatable:*** Other scientists should be able to independently replicate or repeat a scientific study and obtain similar, if not identical, results.
* ***Scrutinizable:*** The procedures used and the inferences derived must withstand critical scrutiny (peer review) by other scientists.

Any branch of inquiry that does not allow the scientific method to test its basic laws or theories cannot be called “science.” For instance, theology (the study of religion) is not science because theological ideas (such as the presence of God) cannot be tested by independent observers using a logical, confirmable, repeatable, and scrutinizable method.

**1.2. What is Society?**

A society is made up of people. Usually, people in a society live within a particular space, such as a country. One society can be comprised of many communities.

People in a society often share a similar culture. A culture refers to the beliefs, values and customs that members of a society often have in common. However, one society can also consist of people from many different cultures.

People in a society are connected through their relationships to each other. For example, as family members, neighbours, work or school mates. They may also be members of cultural, business, religious or political groups.

Societies and their cultures change over time. Recently, the wide spread of technology helped in a rapid change of cultures and societies.

**2. Domains of Science**

There are three broad domains of science:

1. The ***natural sciences*** are concerned with the natural environment in which human beings exist. Natural science is the science of naturally occurring objects or phenomena, such as light, objects, matter, earth, celestial bodies, or the human body. Natural sciences can be further classified into physical sciences, earth sciences, life sciences, and others. Physical sciences consist of disciplines such as physics (the science of physical objects), chemistry (the science of matter), and astronomy (the science of celestial objects). Earth sciences consist of disciplines such as geology (the science of the earth). Life sciences include disciplines such as biology (the science of human bodies) and botany (the science of plants).
2. The ***humanities/human sciences*** are concerned with human existence, history, culture, thought and creativity. They deal with literature, music, art, philosophy...etc.
3. The ***social sciences:*** include disciplines such as *sociology, economics, psychology, geography, political science.* Social science refers tothe field of human knowledge that deals with all aspects of the life of human beings. It deals with knowledge concerned with all aspects of society and human beings themselves.

Each of these fields is subdivided into a number of specialized sciences or disciplines to facilitate more intensive study and deeper understanding.

**Practice**

**Exercise 1.** Answer the following questions.

1. What is society? What is society made of?
2. What do people in society share?
3. What do relationships between people in society include?

**Exercise 2.**

1. What does culture include?
2. What cause society to change? Why?
3. Compare your society to itself in the past in one of the following aspects:

* Food
* Cloths
* Families
* Homes
* Relationships
* Sports
* Education
* Leisure time

1. Use the previously mentioned aspects to compare your society with another one of your own choice.