

What is biology

[Science](#), [Biology](#)



Biology al Affiliation) Biology Prior to entering a biology I had a literal understanding of the term biology. Indeed, I only thought of biology as a science subject that involved the study of human beings, animals, and plants. Nevertheless, I could imagine that the people who specialize in biology were biologists just like in all science subjects. Though I had read some few documents addressing biology, I did not know the acceptable or scientific definition of biology or any biological terms. As such, before joining the biology class I defined biology as a science subject that addressed the life and habitat of all living things. Later, I learned that although this definition is sound, it is not detailed or acceptable.

After joining the biology class, I realized that there have been numerous debates and definitions of the subject biology. Indeed, scientists especially biologists have conducted various studies on the subject with an aim of coming up with a universal, acceptable, detailed, and scientific definition and meaning of biology. As a result, scientific research has derived the acceptable definition of biology. The definition entails all aspects of living things. Scientists derived the word biology from Greek words bios, which means life, and the word logos that means study (Norwegian University of Science and Technology, 2015). As such, research defines biology as the study of the science of life and living organisms that relates to the structure, function, growth, origin, evolution, and distribution of living organisms (Bagley, 2014). Indeed, research establishes various fields of biology that include biochemistry, cellular biology, botany, ecology, genetics, evolutionary biology, molecular biology, zoology, and physiology (Bagley, 2014).

The history of biology dates back to the ancient times when human beings had to study the animals they hunted and plants they gathered (Bagley, 2014). Aristotle is the first person to practice zoology where he performed detailed investigations of marine life and plants (Bagley, 2014).

Theophrastus derived the first botanical terms in 300 B. C with respect to the nature and life cycle of plants. Moreover, German botanist Leonhard Fuchs wrote the first biology book in 1542 while Carolus Linnaeus inaugurated the initial Binomial classification in 1735 (Bagley, 2014). The discovery of microscopes allowed Robert Hooke to examine plant tissue in 1665 and derived the term cells. In the 19th century, botanists and entomologists discovered and described various species (Bagley, 2014). Indeed, Charles Darwin published the book " On the Origin of Species" in 1859 that derived the evolution and interrelations of all living things (Bagley, 2014). Moreover, in 1866 Gregor Mendel became the father of genetics by studying the passage of traits across generations in living things (Bagley, 2014).

The 20th and 21st centuries marks the beginning of the " Biological Revolution" (Bagley, 2014). For instance, Watson and Crick explored the structure and function of DNA in 1953 as different fields of biology continue to expand and relate to our lives (Bagley, 2014). Biology is also overlapping with other sciences like toxicology, physics, astronomy, medicine, and chemistry (Norwegian University of Science and Technology, 2015).

Moreover, biology is also integrating with social sciences like philosophy and sociology. In future, biology will combine with technology to enhance the development of therapies to address specific patient needs (Bagley, 2014).

The use and diversity of biology will also increase in future that will foster the

lighting of buildings, modification of foods, and management of environmental resources in form of synthetic biology (Keasling, 2013). Indeed, in future biology will play a significant role in addressing diverse human needs even as we conserve all habitats.

References

Bagley, M. (2014). What is Biology? Live Science. Retrieved from <http://www.livescience.com/44549-what-is-biology.html>

Keasling, J. (2013). Why Synthetic Biology Is the Field of the Future. PBS. Retrieved from <http://www.pbs.org/wgbh/nova/next/tech/why-synthetic-biology-is-the-field-of-the-future/>

Norwegian University of Science and Technology. (2015). What is Biology? Retrieved from <http://www.ntnu.edu/biology/what-is-biology>