

# The Ethos of Science

In an article on the ethos of science, originally published in 1942, Merton described the ethos of science as “that emotionally toned complex of values and norms which held to be binding on the man [sic] of science.” Control over the scientist’s behaviour is imposed through these norms by sanctions and rewards and “are in varying degrees internalized by the scientist” (Merton, 1968, p605). Merton identified four norms: *Communalism*, *Universalism*, *Disinterestedness*, and *Organized Skepticism*. An acronym for these could be: CUDOS. To these, Ziman (1984) added *Originality*.



Activities: i) Brainstorm examples of each norm, ii) Define Counter Norms, with examples, iii) Indicate your position on the five-point scales and give a rationale for each position.

Developed by J. L. Bencze.

Merton’s Norms	Your Position	Counter Norms
<p><b>Communalism</b> Scientific knowledge is public knowledge; freely available to all. The results of research do not belong to individual scientists, but to the world at large.</p>	<p>1----2----3----4----5 Rationale</p>	
<p><b>Universalism</b> There is no privileged sources of scientific knowledge; the laws of science are the same everywhere and are independent of the scientists involved.</p>	<p>1----2----3----4----5 Rationale</p>	
<p><b>Disinterestedness</b> Scientists are unbiased; science is conducted in order to further human knowledge. They have no personal stake in the acceptance or rejection of data or claims.</p>	<p>1----2----3----4----5 Rationale</p>	
<p><b>Originality</b> Science is the discovery of the unknown; all scientific work must be novel, continually adding to the body of scientific knowledge.</p>	<p>1----2----3----4----5 Rationale</p>	
<p><b>Skepticism</b> Scientists take nothing on trust; knowledge, whether new or old, must always be scrutinized for possible errors of fact or inconsistencies of argument.</p>	<p>1----2----3----4----5 Rationale</p>	

## References

Merton, R. K. (1968). *Social theory and social structure*. New York: New York Free Press.

Merton, R. K. (1973). *The Sociology of Science*. Chicago: University of Chicago Press.

Ziman, J. (1984). *An introduction to science studies: The philosophical and social aspects of science and technology*. Cambridge, UK: Cambridge University Press.