

Class 2, Notes from class

Working definitions of science and technology in the context of society.

What is technology?

- Literally, “the study of methods” or “the study of skills”
- The practical application of knowledge
- Not simply the applications of science.
 - Not dependent on science
 - Can develop empirically
 - Methods that are known to work without knowing how they work
- “Innovation in action that involves the generation of knowledge and processes to develop systems that solve problems and extend capabilities.”
- Tools in a toolbox.
- Is it human-centric? For our class, yes.
- and Society.
 - Personal ambition and insight.
 - Societal decisions: moral norms, active funding, regulation.
 - Environmental pressures and opportunities.
- Can technology be predicted? Yes, based on our current knowledge, to some extent.

What is science?

- A way of acquiring knowledge.
- A method of learning about the physical universe by applying the scientific method.
- Depends on who defines it: “scientists” vs. public
- Scientific method:
 - Make empirical observations, propose hypothesis to explain those observations (theorize), and test those hypotheses in valid and reliable ways (experiments)
- “codified technology” = the sum of skills in practice
- and Society.
 - Is societal by its very nature?