

Appendix C: Tables

Table 2. An overview of readings assigned in a graduate seminar on the values in science designed to support reflection and dialogue among science student and sciences studies students.

Week	Assigned readings
Week 2	<ul style="list-style-type: none"> • Read a chapter of Collins and Pinch's book <i>The Golem</i>
Week 3	<ul style="list-style-type: none"> • The introduction in Kevin Elliott's book <i>A tapestry of values</i> • The introduction in Heather Douglas book <i>Values in Science</i> • Chapter 2 in Elliott's book • Chapters 3 & 6 in Douglas' book
Week 4	<ul style="list-style-type: none"> • Listen to the podcast <i>The science wars</i> • Watch on YouTube <i>Values, biases and trust in Science</i> by Heather Douglas <p>Recommended readings:</p> <p>The rest of</p> <ul style="list-style-type: none"> • Kevin Elliott's book <i>A tapestry of values</i> • Heather Douglas book <i>Values in Science</i>
Week 5	The introduction of Ludwik Fleck's book <i>Genesis of a scientific fact</i> and leaf through the other chapters.
Week 6	<p>Watch on YouTube <i>What is uncertainty and why does it matter</i> with Sheila Jasanoff</p> <p>Read Sheila Jasanoff's paper <i>Technologies of humility</i></p>

Week 7-8	Case-study
Week 9	The chapter <i>Generative Metaphors</i> by Donald Schön
Week 10	Skim chapters 1-6 in <i>The fight against doubt</i> by de Melo Martin and Intemann Select one of the chapters 1-6. Read your chapter more thoroughly and prepare a 10-minute long presentation
Week 11	Skim chapters 7-11 in <i>The Fight Against Doubt</i> by de Melo Martin and Intemann Select one of the chapters 7-11. Read your chapter more thoroughly and prepare a 10-minute-long presentation.
Week 12	Optional reading: <i>Experts and the will of the people: society, populism, and science</i> by Harry Collins et al. (2020).

Table 3. Participants’ final case-study topics and the course concepts and/or literature used

Name	Case-Study Topic	Course Literature/Concepts Used
SL	Examined how volcanologists conceptualize the risk of Mount St. Helens prior to the 1980 eruption. How do they use that framework to make decisions about evacuation and safety?	Values in science (Douglas 2017; 2009) Thought styles and collectives (Fleck 1979) Technologies of Humility (Jasanoff 2003)

BHW	Researched how research papers in environmental psychology are influenced by biases which shape the way that results are analyzed or communicated. Which findings are highlighted within abstracts and what findings are getting cited?	Wishful thinking (Douglas 2009; Elliott 2017; Melo-Martín and Intemann 2018) Thought collectives (Fleck 1979) Generative metaphors and
GG	Examined the role of values in school science education by focusing on the use of contextual knowledge in the chemistry A-level syllabus.	Values in Science (Douglas 2017; Elliott 2017) Values in Science Education (Corrigan et al. 2020)
JA	Looked at how uncertainty in endocrine disruptor science and experts' value judgments cause the development of different views on their safety and effects on human health, leading to disagreements and a lack of consensus between scientists.	Values in Science (Douglas 2009; 2017) Limits to knowledge (Turnhout, Tuinstra, and Halfman 2019)
AR	The subject of this paper: Exploring how graduate students with a background in science think about the role of value-judgments in science.	Values in scientific research and science education, science studies' ongoing engagement with the sciences. For more, see the bibliography of this