

ISS 305 Section 2 Reading List for Fall 2017

Instructor: Dr. Jonathan Weaver

We will work through the topics in order. You should keep up with the readings listed for each topic.

Topic	Subtopic	Authors	Portion and Pages
1. Introduction to the Course	Course Objectives and an Illustration	Huff	Into – pp 9-11
		Lau – The importance of critical thinking	http://philosophy.hku.hk/think/critical/ct.php
		Korn – Bosses Seek ‘Critical Thinking,’ but what is that?	http://www.wsj.com/articles/bosses-seek-critical-thinking-but-what-is-that-1413923730
		Richardson TEDx talk	https://www.schoolofthought.org/
		Fradera (2017)	https://digest.bps.org.uk/2017/07/21/why-some-smart-people-make-foolish-decisions/
		Innocence Project – CONTENT WARNING!	http://www.innocenceproject.org/causes/eyewitness-misidentification/
		Stanovich (Prefaces – pp xi – xv)	http://zhornikov.ru/docs/How_to_think.pdf
		Wells – personal website	https://public.psych.iastate.edu/glwells/
		Well, Lindsay, & Tousignant (1980)	https://public.psych.iastate.edu/glwells/Wells%20pdfs/1980-89/Wells_Lindsay_Tousignant_1980_LHB.pdf
2. Fallacies of Deductive Reasoning	Deductive vs. Inductive Reasoning	SMU	https://www.physics.smu.edu/pseudo/examples_logic.html
		Internet Encyclopedia of Philosophy	http://www.iep.utm.edu/ded-ind/ & http://www.iep.utm.edu/val-snd/
	Logical Fallacies	Gray – Chapter 3	https://www.msu.edu/user/kerr/iss305/graych3p.htm
		Internet Encyclopedia of Philosophy (See notes for which fallacies you should read about)	http://www.iep.utm.edu/fallacy/
		Richardson, Smith, Meaden, & Flip Creative (2017)	https://yourlogicalfallacyis.com/
	Common Heuristics	Ross	https://www.youtube.com/watch?v=HR_q96-YRzk
		APS	http://www.psychologicalscience.org/index.php/news/releases/i-knew-it-all-along-didnt-i-understanding-hindsight-bias.html
3. Empirical Statements and Arguments	Assertions vs. Arguments	Gray – Chapter 1	https://www.msu.edu/user/kerr/p450/graych12.htm
	Types of Statements	Gray – Chapter 2	

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4. Science as a Method of Evaluation	Alternative Means of Evaluation	Watts	http://freakonomics.com/2011/09/29/the-myth-of-common-sense-why-the-social-world-is-less-obvious-than-it-seems/
		Taylor	https://www.psychologytoday.com/blog/the-power-prime/201107/common-sense-is-neither-common-nor-sense
	Essentials of a Scientific Method	McLeod	http://www.simplypsychology.org/science-psychology.html
		Marincola	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1395333/
		Becker	http://www.pbs.org/wgbh/nova/blogs/physics/2015/02/falsifiability/
		Harris (2017)	http://www.npr.org/sections/health-shots/2017/07/04/535412346/scientists-are-not-so-hot-at-predicting-which-cancer-studies-will-succeed
		Gervais (2017)	http://willgervais.com/blog/2017/3/2/post-publication-peer-review
		Smith	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1420798/
		Stanovich (Chs. 1 & 2 – pp 1 – 36)	http://zhornikov.ru/docs/How_to_think.pdf
		Long-Crowell (video)	http://study.com/academy/lesson/self-fulfilling-prophecies-in-psychology-definition-examples.html
5. Problems of Measurement	The Concept and Utility of Measurement	McTavish & Loether	https://www.msu.edu/user/kerr/SP636/McTavish.Loether.pdf
	Levels of Measurement	UC Davis	http://psc.dss.ucdavis.edu/sommerb/sommerdemo/scaling/levels.htm
	Error of Measurement; Reliability and Validity	Lecture based	
6. Problems of Description	Central Tendency	Huff	Ch. 2 – pp 29-38
	Distribution Features	Huff	Ch. 3 – pp 39-54
	Percentages	Huff	Ch. 9 – pp 102-123
	Misleading Graphical Summaries	Huff	Ch. 5, 6 – pp 62-75
		Bergstrom & West	http://callingbullshit.org/tools/tools_misleading_axes.html & http://callingbullshit.org/tools/tools_proportional_ink.html
7. Establishing Associations	Defining and Illustrating Relationships	Lecture based	
	The 2x2 contingency table	Anderson	https://www.msu.edu/user/kerr/SP636/Anderson.pdf
	Common Errors in Judging Relationships	Huff	Ch. 7 – pp 76-88
	From Simple to More Complex Relationships	Lecture based	

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8. Real vs. Illusory Effects	The Concept of Chance	Stanovich (Ch. 11 – pp 167 – 183)	http://zhornikov.ru/docs/How_to_think.pdf
	Human Problems with Probability	Stanovich (Ch. 10 – pp 151 – 165)	http://zhornikov.ru/docs/How_to_think.pdf
		Cherry	https://www.verywell.com/representativeness-heuristic-2795805
		Huff	Ch. 7 pp 76-88
	The Logic of Inferential Statistics	Rugg & Petre	https://www.msu.edu/user/kerr/SP636/Rugg.Petre.pdf □
	Practical Significance	Lecture based	
	Effect Size	Lecture based	
9. Establishing Causal Relationships	Causality	Lecture based	
	Correlation vs. Causation	Stanovich (Ch. 5 – pp 73 – 83)	http://zhornikov.ru/docs/How_to_think.pdf
		Huff	Ch. 8 – pp 89-101
		Wikipedia entry	https://en.wikipedia.org/wiki/Correlation_does_not_imply_causation
		Matthews (2000)	http://robertmatthews.org/wp-content/uploads/2016/03/RM-storks-paper.pdf
	Causal Heuristics	Lecture based	
	The Logic of Experimentation	Stanovich (Ch. 6 – pp 85 – 106)	http://zhornikov.ru/docs/How_to_think.pdf
	Rival Hypotheses in Simple Experiments	Pyke & Agnew	http://www.msu.edu/user/kerr/SP636/Pyke.Agnew.pdf
	Threats to Internal Validity in Experiments	Anderson	https://www.msu.edu/user/kerr/SP636/Anderson.Pt2.pdf
	Distinguishing True Experiments from Imposters	Lecture based	
	Complex Causality	Stanovich (Ch. 9 – pp 143 – 150)	http://zhornikov.ru/docs/How_to_think.pdf
10. Evaluating Non-Experimental Evidence	Essentials of Surveys	Schwarz	https://www.msu.edu/user/kerr/SP636/Schwarz.pdf □
	Quasi-Experiments and Evaluation Research	Babbie	http://www.msu.edu/user/kerr/SP636/Babbie.pdf
	Naturalistic Observation	Lecture Based	
11. Generalization	Alternative Models for Generalization	Lecture Based	
	Artificiality	Stanovich (Ch. 7 – pp 107 – 121)	http://zhornikov.ru/docs/How_to_think.pdf
	Barnum Effects	Lecture Based	

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12. General Strategies for Evaluating Evidence	Basic Rules for Evaluation	Lecture Based	
	Talking Back	Huff	Ch. 10 – pp 124-144
	Converging Evidence	Stanovich (Ch. 8 – pp 123 – 142)	http://zhornikov.ru/docs/How_to_think.pdf
	Research Produces & Consumers	Lecture Based	
13. Topical Exercises	Readings TBD		