Physics 180/ TEP 105 Reading List:
(Actual)

Week 1: Introduction -- Problems & Queries:
Third International Mathematics and Science Study (TIMSS) Summary
McDermott, “How We Teach and How Students Learn - A mismatch?” AJP 61(4), (1993), p295,

Week 2: Introduction / Survey of Physics Ed Reviews (some subset of)
Arons, A.B., “Cultivating the capacity for formal reasoning: Objectives and procedures in an introductory physical science course,” AJP 44(9), (1976), 834.

Week 3: PreCollege Circuits E/M:
Summers, Kruger, and Mant, Teaching Electricity Effectively: a research-based guide for primary science, Association for Science Education United Kingdom, 1997.

Week 4: Pre-Service / In Service Teachers in E/M:
McDermott, and Shaffer, “Research as a guide for curriculum development: an example from introductory electricity Parts I&II” AJP 60(11), (1992), 994-1013

Week 5: College Physics:

http://communication.ucsd.edu/LCHC/nfinkels/Physics180.html
Week 6: Theories of Learning / Cognitive Science:

Week 7: Continued: Construct-isms

Week 8: Continued
Bruer, J.T., “Science inside the Black Box” in J.T. Bruer Schools for Thought, Bradford Books
Brow, Collins, Duguid, “Situated Cognition and the Culture of Learning,” Educational
Researcher, Jan - Feb 1989, 32-42.

Week 9: Context and Culture
Dewey, J., Experience and Education, Ch’s 1, 2 & 7 Science Chapter

Week 10: Physics and Gender
Introduction and Chapeter 9: Physics and Math

http://communication.ucsd.edu/LCHC/nfinkels/Physics180.html