** *SEMINAR REPORTS* **

The following topics correspond mainly to articles contained in Duncan and Weston-Smith's *Encyclopedia of Ignorance* (Pergamon, 1977); each topic coded to an EOI article is supported by a brief, report-ready reference. You may confine your report to the associated article, or you may use the *Encyclopedia* article as a springboard for further research; in either case, however, you should conduct enough ancillary research (a brief tour through the indices to journals such as *Scientific American*, *American Scientist*, *Science*, *Nature*, etc. will suffice) to determine whether scientific understanding in your topic-area has significantly improved since 1977. You may, alternatively, substitute approved topics for those listed here should your own interests so dictate.

We will have time for a maximum of eighteen (18) in-class discussions, so Topics 1-18 will involve an oral/written option (oral presentation: not to exceed eighteen minutes; written report: not to exceed eight double-spaced typed pages). Written reports selected from Topics 1-18 will be read to the class either by yourselves or by your instructor. This term, class size is expected to exceed thirty students; should the prediction become fact, seminar reports will be assigned to teams of paired students, rather than to individuals.

Additional topics (items 19-30) are included should class size exceed thirty-six persons; these topics are coded to texts on reserve in the Walker Library (see below).

Topics are available on a first-come/first-serve basis (early selections have survival value).

All reports must be presented/submitted on the assigned due dates.

****

TOPIC	SOURCE	DUE DATE
1. The Nature of Knowledge	EOI	10/01
2. Curved Space	EOI	10/01
3. The Riddles of Gravitation	EOI	10/01
4. A Clash of Paradigms in Physics	EOI	10/12
5. The Hinterland Between Large and Small	EOI	10/12
6. The "Arrow of Time" and Quantum Mechanics	EOI	10/12
7. The Sources of Variation in Evolution	EOI	11/02
8. The Limitations of Evolutionary Theory	EOI	11/02
9. Fallacies of Evolutionary Theory	EOI	11/02
10. Rethinking the Origins of the Genus *Homo*	EOI	11/05
11. Developmental Biology	EOI	11/05
12. Synthetic Life for Industry	EOI	11/05
13. Problems Outstanding in the Evolution of Brain Function	EOI	11/30
14. The Languages of the Brain	EOI	11/30
15. Consciousness	EOI	11/30
16. Why Do We Not Understand Pain?	EOI	12/03
17. Complexity and Transcomputability	EOI	12/03
18. Human Thought and Action in System Behavior	EOI	12/03
19. Ontological Relativity	Reserve	11/02
20. The Way the World Is	Reserve	11/02
21. The Role of Value Judgments in Science	Reserve	11/02
22. Why Astrology is a Pseudo-Science	Reserve	11/02
23. Defending Society Against Science	Reserve	11/02
24. What is an Explanation?	Reserve	11/02
25. Simplicity	Reserve	11/02

TOPIC	SOURCE	DUE DATE
26. What is Science?	Reserve	11/02
27. Historical Understanding and Science	Reserve	11/02
28. Science and the Physical World	Reserve	11/02
29. Observation	Reserve	11/02
30. Hypothesis	Reserve	11/02

*** INDEX OF ADDITIONAL TOPICS ***

Seminar Report Topics 19-30 above are coded to articles located in the following three texts, copies of which can be found on the Walker Library Reserve Shelf:

QUINE = Quine, Willard Van Orman. *Ontological Relativity and Other Essays.* New York: Columbia University Press, 1969.

GOODMAN = Goodman, Nelson. *Problems and Projects.* Indianapolis: Hackett, 1972.

KLEMKE = Klemke, E.D. et al., eds. *Introductory Readings in the Philosophy of Science.* Buffalo: Prometheus Books, 1980.

TOPIC	SOURCE	PAGES
19. Ontological Relativity	QUINE	26-68
20. The Way the World Is	GOODMAN	24-32
21. The Role of Value Judgments in Science	KLEMKE	269-291
22. Why Astrology is a Pseudo-Science	KLEMKE	66-75
23. Defending Society Against Science	KLEMKE	55-65
24. What is an Explanation?	KLEMKE	87-103
25. Simplicity	GOODMAN	257-365
26. What is Science?	KLEMKE	35-54
27. Historical Understanding and Science	KLEMKE	124-136
28. Science and the Physical World	KLEMKE	169-174
29. Observation	KLEMKE	152-163
30. Hypothesis	KLEMKE	196-206