SAMPLE SYLLABUS
HISTORY & PHILOSOPHY OF SCIENCE

Course Description:
This course is a graduate seminar covering contemporary history & philosophy of science. Topics include progress, realism, observation, operationalism, measurement, experimental apparatus, intervention, reduction, laws, explanation, idealization, pluralism, and models. Students will also be trained in the professional skills needed to succeed in the field.

Assessment:
Discussion 20%
Presentation 20%
Paper Draft 20%
Peer Review 10%
Term Paper 30%

Discussion:
Contributions to class discussion should be well informed by careful reading of the week’s material at a minimum. In addition, discussion should be courteous: ask genuine questions, give other students credit for their ideas, take all contributions seriously, work toward consensus while accepting differences of opinion.

Presentation:
Students will each take a turn presenting their term paper work in the style of a conference presentation. The rest of the class will practice asking good questions of the presenter.

Term Paper:
The main assignment is a research paper on an original question related to the course readings. The process will mimic that of submitting a paper for publication, receiving reviewer comments, then revising for resubmission. Students will first submit a complete paper. The instructor will act as editor, assigning each paper to two students for anonymous peer review. As reviewers, each student will carefully read and comment on two of their classmates’ papers, suggesting minor or major revisions. The reviews plus editor comments will be returned to students, to guide their revisions before preparing their polished, publication-ready final paper.

Sample Readings:
Readings may include work by Duhem, Poincaré, Popper, Bridgman, Kuhn, Feyerabend, Lakatos, Shapere, Hempel, Nagel, Putnam, Galison, Hacking, Cartwright, van Fraassen, Kitcher, Salmon, Schaffner, Bogen & Woodward, Morgan, Morrison, Mitchell, Chang, and Winsberg.