**

Syllabus
HSCI 3333

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Issues in 20 th Century American Science

The primary goal of this IT Honors course is to familiarize students with a number of central topics in the history of science and technology in theUnited States during this nearly completed century. We will consider issues that have been central to modern history of science: experts and the enormous influence of scientific thinking in the progressive era of the early twentieth century; technology and public culture as reflected in not only industrial investments but also in the very toys engineered for children; the sources and goals of eugenics and genetics as these were pursued by scientists and political leaders; the national and international context of science through wars and depression; the institutional dynamics of science in the Cold War and Space Age; and the implications of "big science" for individual scientists. Issues of individual and group ethical behavior will be a subtheme of the course, as the class considers the intellectual, social, political, economic, and private components of choice in the context of professional expectations.

Students will be expected to complete readings as assigned on the syllabus and come prepared to discuss these in class or to participate in on-line discussions or postings. There will be three microthemes (15%), four computer tasks (20%), a group project (10%), as well as a midterm (20%) and a final exam (20%). Class participation (15%) will be included as part of the overall evaluation of each student in the class based on participation in class, discussion groups, and the discussion board. Late assignments will be reduced in grade, and an incomplete in the course is possible only in unusual circumstances and with explanations documented in writing. This course meets the historical perspectives, citizenship and public ethics, and writing intensive requirements of the university requirements as defined by the Council on Liberal Education.

Texts for the class include the following books, on reserve in Walter Library and also for sale in the Williamson Bookstore:

*Jeffrey Burton Russell, *Inventing the Flat Earth: Columbus and Modern Historians* (New York: Praeger, 1991).

*Diane B. Paul, *Controlling Human Heredity, 1895 to the Present* (Atlantic Highlands, NJ: Humanities Press Intl., 1995).

*Loren Graham, *The Ghost of the Executed Engineer: Technology and the Fall of the Soviet Union* (Cambridge: Harvard University Press, 1994).

*Howard E. McCurdy, *Inside NASA: High Technology and Organizational Change in the U.S. Space Program* (Baltimore: Johns Hopkins University Press, 1993).

(On reserve and recommended) John Hatton and Paul B. Plouffe, *Science and Its Ways of Knowing* (Upper Saddle River, NJ: Prentice Hall, 1997).

Computer Web Site - case studies and class assignments at www.umn.edu/scitech/3333h-home.htm

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Course Instructors and Their Availability**_

In addition to office hours and assistance in class, on-line help will be available. If you have a general question, you should post it on the discussion board so fellow students and the instructors may help. If you have a more urgent problem, you may contact the TA or faculty member at the e-mail addresses listed below. You are particularly encouraged to take advantage of the office hours if you encounter problems with your reading or other assignments, seek special help with understanding the material, or simply want to explore the issues being raised in class.