Philosophy of Mathematics
Phil 162/262 (Same as Math 162) – Spring Quarter 2008
Preliminary Syllabus

Meeting times: MW 11:00-12:15, Room 200-015
Instructor: Solomon Feferman
Feferman office hours: Tu 2:30-4:00 and by arrangement, Room 380-383Z
Registration: Undergrads register in Phil 162 (not Math 162); grads register in Phil 162

Course Description: 20th-century approaches to the foundations and philosophy of mathematics. The background in mathematics, set theory, and logic. Schools and programs of logicism, predicativism, platonism, formalism, and constructivism. Readings from leading thinkers. Historical background in the ideas of Plato, Aristotle, Kant, Mill and Frege.

Prerequisite: Phil 151/251 (First-Order Logic) or consent of the instructor.

Course work: The course will be conducted in a combined lecture/seminar format. Active participation by students will be required, including possible presentation of some of the material from chapters in the texts listed below and other parts of the literature. In addition, the work for the course will consist of two papers, one of 5-7 pages and the second (final) one of 8-10 pages; due dates to be announced later. There will be no homework or examinations. Grade for the course is Letter, with CR/NC optional. 4 units

Texts:
      S. Shapiro, *Thinking about Mathematics* (required)
      S. Shapiro (ed.), *Oxford Handbook of the Philosophy of Mathematics and Logic* (recommended)

On Reserve in Tanner Library:
      P. Benacerraf and H. Putnam (eds.), *Philosophy of Mathematics*
      A. George and D. Velleman, *Philosophies of Mathematics*
      W.D. Hart, *The Philosophy of Mathematics*
      P. Mancosu, *From Brouwer to Hilbert*
      S. Shapiro, *Thinking about Mathematics*
      S. Shapiro (ed.), *Oxford Handbook of the Philosophy of Mathematics and Logic*
      J. van Heijenoort (ed.) *From Frege to Gödel. A Source Book in Mathematical Logic (1879-1931).*