Descartes described his theoretical orientation toward “a general science of order and measure” as *mathesis*, or a methodological strategy and metaphysical system for confronting, describing, and reorganizing the natural world into a framework capable of producing knowledge. This seminar will explore a set of ‘mathetic’, ‘diagrammatic’, and spatialized models for methodological thinking early modern philosophers developed to negotiate a world in which the metaphysical, social, and technological grounds for knowledge were in radical ferment. *Not* a survey of major positions and theoretical orientations in philosophy of science, we will instead investigate varying philosophical senses and roles of mathematical and geometrical models for philosophical method in seventeenth century thought. The seminar will be divided into four units:

1. The translation of axiomatic and calculative approaches to knowledge-production into forms and theories of experimental and philosophical practice in the post-Copernican tradition of astronomical metaphysics, considering material from Giordano Bruno and Galileo Galilei.
2. Descartes’s transformation of an inclination toward *mathesis* into a philosophical method in his early masterpiece, *Rules for the Direction of Mind*; we’ll also engage his project to redescribe geometry algebraically in the *Geometry*.
3. The simultaneously devastating and productive return of the qualitative-repressed to quantifying- and geometrizing-consciousness in work by G.W. Leibniz and Isaac Newton on mapping infinitesimal differences in force and motion.
4. A look back at the issues we’ve discussed from the self-proclaimed perspective of their theoretical closure (and then the closure of that closure) in Edmund Husserl’s “The Origins of Geometry” and Jacques Derrida’s later introduction to it.

This plan remains tentative and may change as I develop the course or on the basis of specific student interest once the seminar is formed. There are, for example, a variety of other textual points of reference I already think it’s monstrous not to include but that I’ve left out for reasons of time: Charles de Bovelles’ mathematical and diagrammatic metaphysics; Johannes Kepler’s astronomical-geometrical-metaphysical radicalization of Platonic solids; Francis Bacon’s explicitly non-geometrical but still radically-formal methodological alternative; Blaise Pascal’s staging of a confrontation the power of geometrical and philosophical finesse; Thomas Hobbes’s reflections on method (which cast geometry and politics as the two sciences in which perfect knowledge is possible); the clashes between Hobbes and Robert Boyle (or for that matter, Baruch Spinoza and Boyle) over the role of geometry in experimental philosophy; Spinoza’s geometrical recasting of Cartesian metaphysics and his own development of an original axiomatic method for philosophy; etc. etc. The Husserl/Derrida unit could be replaced with a Deleuze/Badiou clash over the axiomatic; with Merleau-Ponty’s critical engagement with Cartesian physics, etc. etc.

No special background in geometry, mathematics, or early modern philosophy is necessary for the seminar (we’ll start by doing Book 1 of Euclid’s *Elements* to get a *practical* sense of axiomatic, postulative, and diagrammatic thinking at their most basic). The course will require active participation in discussion, at least one class protocol, at least one seminar presentation, and one paper. Contingent on class size, it may also require micro-presentations and responsibility for leading discussions.