

THE UNIVERSITY OF WESTERN ONTARIO
DEPARTMENT OF PHILOSOPHY
Undergraduate Course Outline 2011-2012

**Philosophy 4610F: Problems in Metaphysics – Oppositions and Paradoxes in Philosophy
and Mathematics**
Previously Philosophy 408

Fall Term 2011
Class Days and Hours: W 11.30-2.30
TC303

Instructor: Professor John L. Bell
StH 4130, 661-2111 x85750
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COURSE DESCRIPTION

Underlying the evolution of mathematics and philosophy has been the attempt to reconcile a number of interlocking oppositions, each of which has on occasion crystallized into paradox and which continue to haunt thinking to this day. These include the *Continuous and the Discrete*, the *One and the Many*, the *Finite and the Infinite*, the *Whole and the Part*, and the *Constant and the Variable*. In this course I shall attempt to trace the impact that these fundamental concepts have had on the thinking of philosophers and mathematicians throughout the ages – such as Aristotle, Epicurus, Descartes, Newton, Leibniz, Euler, Berkeley, Kant, Hume, Hegel, Dedekind, Cantor, Brentano, Brouwer, and Weyl.

TEXTS

Course notes downloadable from my website (<http://publish.uwo.ca/%7Ejbell/>) under **Expositions and Course Notes**: *The Continuous and the Discrete in the History of Thought*. Also a *paper* under **Preprints**. Other texts will be suggested during the course.

OBJECTIVES

The principal objective of this course is to convey to students the importance that fundamental oppositions have had in the development of philosophy and mathematics.

REQUIREMENTS

Two essays to be submitted during the course.

AUDIT

Students wishing to audit the course should consult with the instructor prior to or during the first week of classes.

The **Department of Philosophy Policies** which govern the conduct, standards, and expectations for student participation in Philosophy courses is available in the Undergraduate section of the Department of Philosophy website at <http://uwo.ca/philosophy/undergraduate/proceduresappeals.html>. It is your responsibility to understand the policies set out by the Senate and the Department of Philosophy, and thus cannot be used as grounds of appeal.

