Professor Michael Bradie

Research and Teaching Interests

My main interest is in the philosophy of science and epistemology. I regularly teach graduate level courses in the philosophy of biology, the philosophy of the social sciences, and general introductions to the philosophy of science. At the undergraduate level, I teach an introduction to the logic of science and, for the past 30 years a populare upper division course in the philosophy and physics of space and time. For many years I taught that course with a colleague in the Physics department, Comer Duncan, who has since retired. I now offer the course on my own and students can sign up for either philosophy or physics credit. We produced a draft of a text for the course that can be accessed at http://physics.bgsu.edu/p433/ [this is a scanned uncorrected versions so be forewarned].

In addition, I teach logic at all levels as well as, occasionally, courses in social and political philosophy and the history of modern and contemporary philosophy.

My main research interest is in the philosophy of science and more specifically in the philosophy of biology. I am particularly interested in the metaphorical dimensions of scientific descriptions and scientific reasoning. A little reflection should convince you that scientific arguments, reasoning and communication are shot through with metaphorical tropes. A classical tradition dating back to the formation of the Royal Society in the 17th century has it that metaphors are systematically eliminated as 'true' scientific understanding increases. An unbiased examination of the historical realities reveals the error of this attitude. It is also often argued that mathematical descriptions replace metaphorical representations but I have argued that mathematical descriptions are just another metaphorical mode of representation. The moral is: you can abandon particular metaphors but you can't escape their use entirely. [In all fairness, I must point out that many of my colleagues remain unconvinced!]

My work in the philosophy of biology has focused on the role of metaphors in shaping biology thinking and in the role of biological metaphors in shaping our thinking about social, political and epistemic issues.