

PHIL 350

Students who register for this course must be aware that it is always focussed on one branch of ancient mathematics. In the past, we have focussed either on geometry, or astronomy, or mechanics or optics. This term we will focus on music theory. This might seem odd, because very few people today think that music theory is a branch of mathematics or any other science. But one of the most significant traditions of ancient Greek music theory treated music theory as a branch of "mixed mathematics", i.e., as an application of propositions of pure mathematics to the things we hear as melody -- in something like the way that astronomy was taken to be an application of mathematics to the observed motions of the heavens. Even the Greek music theorists who denied that music theory is mathematical believed that it counted as a science. As such, they subjected it to the same standards of demonstrative rigour as in mathematics. This meant that it was to consist in a body of theorems derived axiomatically from its "elements" or indemonstrable first premisses (whatever they might be). Our agenda for this term will be to learn what sort of science music theory might have been for the ancient Greeks and -- if time permits -- the theorists writing in Arabic who later appropriated ancient Greek music theory as an account of their own music. This course is meant for students interested in ancient philosophy, classics, Islamic studies, history and philosophy of science (including, of course, mathematics) and music theory. I particularly encourage students with a background in music to take this course. Students who do not have such a background are welcome, but they must be prepared to pick up the rudiments. At a very minimum, you should know what octaves, fifths and fourths are and be familiar with the elementary notion of scales.