FS102: Spring 2017

The Harmony of the World

Prof. Daniel Willey
Office: Carr 127

Office hours: Mon: 10-11 AM & 3:30-5:00 PM; Tues: 10:45AM -Noon;
Wed: 10-11 AM; Thur: 10:45 AM -Noon & 3:00 - 4:15 PM, or by appointment.

“The notion of cosmic harmony expressed in numerical ratios and conceived as astral music is one of those ideas of genius that have remained amazingly fruitful over the centuries.” - Charles Kahn

“Music is a hidden arithmetic exercise of the soul, which does not know that it is counting.” - Gottfried Leibniz

“He who never looks for number in anything, will not himself be looked for in the number of famous men.” - Plato

“We have to admire in humility the beautiful harmony of the structure of this world as far—as we can grasp it. And that is all.”

- Albert Einstein

Course Description

An historical investigation of the belief that nature is guided by principles of harmony. Often referred to as the “harmony of the spheres,” the intriguing idea that the orbiting planets emit musical notes originated over two-thousand years ago. Recently it has made a surprising comeback in the yet unproven idea that all matter is made up of tiny vibrating ‘strings.’ In this course we trace the history of the idea and its many manifestations in philosophy, music, science, and literature. In tracing the history of this idea we will be looking at how harmony music, mathematics, physics, astronomy, philosophy, psychology, biology, politics, and a few other things as well.

Texts

Listed below are the texts which you need for this course. In addition to the three books listed I will also provide additional handouts and links to online sources.

The Republic of Plato, 2nd Ed.

Timaeus and Critias (Penguin Classics) Revised Edition


Attendance

I consider class attendance to be mandatory, as does the College. If you cannot come to class because you are ill or have a college-sanctioned athletic event you should notify me by email. I require attendance because it is in YOUR best interests to come to class. Attendance will be factored into the participation component of your course grade.

Assignments

Since the underlying objective of all FS102s is to help you become better at writing and speaking, (and trust me, there is always room for improvement!) there will be ample opportunity for you to write and speak.
**Writing**
* Homework assignments: There will be regular homework assignments, usually associated with the assigned reading.
* In-class quizzes and writing exercises: There will be occasional in-class quizzes and short writing exercises
* Longer assignments: There will be two shorter papers and one longer paper, due at the end of the semester.

**Speaking**
* There will be two formal in class presentations, approx. 8 min. each.

**Participation**
* I expect everyone to contribute in class, either to discussions or by responding to the questions I pose. You don’t need to say something every class, rather I’m looking for regular (i.e., at least every third class) contributions.

**DUE DATES:**
- Papers: 2/23, 3/30, 5/5
- Presentations: TBD

**Evaluation**
Your course grade will be calculated according to the following weighting scheme:

- **Homework & In-class exercises:** 20%
- **First two papers:** 15% × 2 = 30%
- **Final Paper:** 20%
- **Presentations:** 10% × 2 = 20%
- **Participation:** 10%
- **Total:** 100%