Astronomy and the Arts A Humanities Seminar Dr. Richard L. Poss rposs@arizona.edu

This seminar examines the intersection of astronomy and the arts by studying astronomical ideas as they occur in works of art, literature, and music. Participants will experience a diverse assortment of cultural works from different periods, all portraying and responding to astronomical ideas. From frescoes in ancient Rome to contemporary space painting, we will examine the artifacts for what they reveal about both the poetic and the scientific worlds. In this process we will become acquainted with the details of the astronomical content which is the context for the work. Classroom sessions will be a combination of lecture and discussion.

This seminar meets from 2pm to 4pm on Mondays in the Poetry Center.

- 1. Jan. 30 Art and astronomy in prehistory. Worldwide Archaeoastronomy and astronomical motifs in prehistoric art. The earliest art and the earliest astronomy. Megalithic circles, petroglyphs, geoglyphs, rock art. The Nebra Sky disk.

  Archaeoastronomical inspiration for contemporary land art: Stonehenge, James Turrell.
- 2. Feb. 6 Art and cosmological models in the presocratic philosophers of ancient Greece. Ancient celestial globes. Mosaic floors. The antikythera and its implications. Astronomy in Mithraic art and Roman mystery religions.
- 3. Feb. 13 Astronomical art in medieval manuscripts, Gothic cathedrals, medieval clocks. The *Très Riches Heures*. The Astrolabe.
- 4. Feb. 20 The Renaissance adventure: Copernicus and Galileo. Astronomy and Astrology in Medici Symbolism. Perugino's astronomical imagery. Leonardo da Vinci and astronomy. Brecht, *Galileo*.
- 5. Feb. 27 Astronomy in the Art of the Old Masters: Elsheimer, Cigoli, Van Eyck, Vermeer, Pietro da Cortona, Donato Creti. Voltaire, *Micromegas*.
- 6. Mar. 13 Astronomy in lyric poetry: Boethius, Dante, Shakespeare, Spenser, John Donne. Alexander Pope, William Blake. John Keats. Walt Whitman.
- 7. Mar. 20 Opera, Ethics, the Bomb: John Adams, *Doctor Atomic*. Heiner Kipphardt, *In the Matter of J. Robert Oppenheimer*. The Hydrogen Bomb and the Cold War. PBS American Masters series: *The Trials of J. Robert Oppeheimer*.

- 8. Mar. 27 Dürrenmatt, *The Physicists*. Robert Frost, William Carlos Williams, Wallace Stevens, T.S. Eliot. Varieties of Modernism: Rene Magritte, Frida Kahlo, Remedios Varo. Giorgio de Chirico, Max Ernst, Joseph Cornell.
- 9. Apr. 3 Space Art: Chesley Bonestell, David Hardy, Robert McCall, William K. Hartmann, Pat Rawlings, Kim Poor, Lynette Cook. From painting and orchestral music to digital video Planetarium shows.
- 10. Apr. 10 Music: Haydn, Herschel, Holst, Glass. Salgado and Kronos Quartet. Conceptual art and social media. Astronomical art in movies, TV, and YouTube Videos.

## Required Texts:

Friedrich Dürrenmatt, *The Physicists* (Grove Press) 1991. ISBN: 978-0-8021-4427-0. Bertolt Brecht, *Galileo* (Grove Press) 1966. ISBN: 978-0-8021-3059-4. Heinar Kipphardt, *In the Matter of J. Robert Oppenheimer* (Hill & Wang) 1997. ISBN: 0-8090-1215-4 Voltaire, *Micromegas*. (Online).

## Suggested works of music:

Gustave Holst, *The Planets*. William Herschel, *Symphonies 8, 12, 14*. John Adams, *Doctor Atomic*. Terry Riley, *Sun Rings*.