

**Political Studies Program, Summer 2013**  
**MODERN SCIENCE AND POLITICS**  
**Instructor: Tobin Craig**  
**Washington, D.C.**

From a comparative and historical perspective, one of the most unusual features of our public life is the public status accorded to the enterprise we call 'science.' With perhaps one or two exceptions, no feature of our public life is as uncontested, that is, generally regarded as unworthy of reflection because self-evidently and unproblematically good. It would seem to require a special effort to come to see science—or inquiry into nature with the goal of replacing belief with knowledge—as questionable. We will undertake that effort of inquiring after inquiry, of thinking through the goodness of science. Just what is science for?

For help with this question we turn to certain of the writings of Francis Bacon. Bacon's answer—which helped transform natural philosophy into the methodical, collective enterprise familiar to us today—remains, in many respects, our answer. In returning to Bacon's thought, we are thus afforded an occasion to reexamine the purpose of science, and the relationship between science, technology, and politics.

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**Monday, July 22, 2013, 9:00 am to Noon**

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***The Ancients on Science, Technology, and Politics***

Readings:

- Thomas Pangle, trans., *The Laws of Plato*, 797a–800b (pp. 185–189)
- John Dryden, trans., *Plutarch's Lives*, "Marcellus"
- Francis Bacon, *Daedalus*
- Francis Bacon, *Orpheus*

Discussion Questions:

1. What, according to Plato and Aristotle, is the problem with innovation, and innovation in the arts in particular?
2. What, according to Aristotle, is the good of philosophy or science?
3. Plutarch presents Archimedes as aware of the potential practical value of science, but as not regarding this value as especially serious or important. What does Plutarch mean for us to see through his presentation of Archimedes?

***Daedalus and Orpheus***

Readings:

- Francis Bacon, *Daedalus*
- Francis Bacon, *Orpheus*

Discussion Questions:

1. What do we learn from Bacon's presentation of the encounter between Minos (law) and Daedalus (the inventor)? What problems does the inventor pose to politics? What does Bacon's failure to offer solutions suggest?
2. Bacon's Orpheus presents and allegorical presentation of the history of philosophy. What do we glean from considering Orpheus's failures?

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**Tuesday, July 23, 2013, 9:00 am to Noon**

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***The Great Instauration***

Readings:

- Francis Bacon, *The Great Instauration*

Discussion Questions:

1. How does Bacon justify his "Instauration," a founding or refounding of science? What's wrong with the existing science?
2. What is the basis for his belief that another science is possible? What are the key innovations in this new science?

***Novum Organum***

Readings:

- Francis Bacon, *Novum Organum*, Preface and Book I, Aphorisms I – LXVIII, with a focus on XXXIX – LXVIII.

Discussion Questions:

1. What is Bacon's critique of the ancients/ancient philosophy?

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**Wednesday, July 24, 2013, 9:00 am to Noon**

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***Novum Organum***

Readings:

- Bacon, *Novum Organum*, Book I, Aphorisms LXIX – CXXX, with a focus on LXIX – LXXVII and CVIII – CXXX

Discussion Questions:

1. Why does Bacon think something more is possible?

2. Insofar as it is made clear in *Novum Organum*, what would the “institutionalization” of this new science look like in practice?
3. What would this entail for science? For the political community?

## ***New Atlantis* Introduction and Action**

### Readings:

- Francis Bacon, *New Atlantis*

### Discussion Questions:

1. What happens in the *New Atlantis*? Concentrate on the narrative action—the travel story.
2. Why does the narrator include the details about the arrival and reception of the Europeans to Bensalem?

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## **Thursday, July 25, 2013, 9:00 am to Noon**

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### ***New Atlantis*: Bensalem’s Political History**

#### Readings:

- Francis Bacon, *New Atlantis*

#### Discussion Questions:

1. Try to assemble the political history of Bensalem from the details we are provided. Presuming these to be connected to Bensalem’s peculiar felicity, what does this reveal about Bacon’s thought on the relationship of science and politics?

### ***New Atlantis*: Bensalem’s Religious History**

#### Readings:

- Francis Bacon, *New Atlantis*

#### Discussion Questions:

1. What is the place of religion in Bensalem?
2. What do you make of the miraculous arrival of Christianity to Bensalem? What does this reveal about Bacon’s thought on the relationship of science, religion, and politics?

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**Friday, July 26, 2013, 9:00 am to Noon**

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***New Atlantis: Science and Society***

Readings:

- Francis Bacon, *New Atlantis*

Discussion Questions:

1. The showpiece of *New Atlantis* is the revelation of Salomon's House. What are we meant to see in the enumeration of the findings and activities of Salomon's House?
2. What features of this institution stand out? What do they disclose about Bacon's thought on how science can or should be institutionalized?
3. Is Salomon's House a model? What is the meaning of its extreme secrecy? Its public presentation? Its relationship to the state? Its aim or end?

**Teaching of *New Atlantis*: Politics and Technological Science**

Readings:

- Francis Bacon, *New Atlantis*

Discussion Questions:

Free discussion of Bacon's teaching in *New Atlantis* and its significance for us today.