UC Center Program Courses – Fall 2015
PCC 119. **Science in Paris: From the Jardin des Plantes to the Tour Eiffel**

Prof. Justin E. H. Smith

contact: jehsmith@gmail.com

**Lecture**
M 4:00 pm – 5:30 pm
W 4:00 pm – 5:30 pm

Office Hours
by appointment

**COURSE DESCRIPTION**
Since the Scientific Revolution of the early 17th century, France has been the site of many of the most important scientific innovations of the modern age. More than this, science has played a crucial role in the construction of French national identity. From the 1635 foundation of the Jardin des Plantes by Louis XIII as a center of botanical and medical research, to the construction of the Eiffel Tower as a monument to the scientific accomplishments and to the engineering might of France, discoveries, innovations, and scientific feats have long been at the heart of France's understanding of its own place in the world. In this course, we will investigate the history of science in modern France, with a particular focus on the figures and institutions that contributed to this history within the walls of Paris. We will develop a critical approach to these figures, borrowing methods and insights from the scholarly discipline known as 'history and philosophy of science', or 'HPS'. **5.0 credits**. Suggested subject areas for this course: *Philosophy/History*

**COURSE MATERIALS**
Course Reader **[CR]**

**COURSE REQUIREMENTS**
**Attendance at lectures and site visits is mandatory**. It is essential that you attend all classes and participate actively. As per the UC Attendance Policy, excessive absences and tardies will result in a lowered final grade. Please refer to the UC French and European Studies Program Academic Handbook for the policy on absences and tardies.

**Participation and reading assignments are critical**. For the purposes of this class, participation means reading the materials in advance, coming to class on time, staying for the entire class period, and actively taking part in discussions and other in-class exercises and activities. A large part of this portion of your grade is simply **paying attention**; in order to pay attention, you must be present! Lateness and absences will have a strong negative effect on your participation grade.

**Assignments:** Deadlines for assignments are to be respected. There will be NO extensions on assignments, nor will there be any additional or make up assignments.

**Grade Breakdown:**

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|---|---|
| Participation in class discussion: | 10% |
| Oral Presentation: | 10% |
| Midterm Exam | 20% |
| Short Paper 1 (4-6 pages): | 20% |
| Short Paper 2 (4-6 pages): | 20% |
| Final Exam: | 20% |

**A Note on Academic Dishonesty**: Regardless of the quality of work, plagiarism is punishable with a failing grade in the class and possible dismissal from the program. Plagiarism may be broadly defined as copying of materials from sources without duly citing them, claiming other's ideas as one's own without proper reference to them, and buying materials such as essays/exams. If you have questions about what constitutes plagiarism, please ask your instructor.

**A Note on Electronic Devices**: As a courtesy to your instructor and fellow students, please do not use cell phones, laptops, tablets, e-readers, or other electronic devices during class, even to check the time. Make sure phones are turned off. Use of these devices will lower your participation grade. No recording (audio or visual) of class sessions will be permitted.

**COURSE SCHEDULE (subject to change at the instructor's discretion)**

Week 1
**Introduction: What is 'History and Philosophy of Science'?**

**Monday, September 14**
Introduction

**Wednesday, September 16**
Reading:
- Steven Shapin, *A Social History of Truth* (excerpts)

Week 2
**The Scientific Revolution Comes to France**

**Monday, September 21**
Reading:
- Emma C. Spary, *Eating the Enlightenment: Food and the Sciences in Paris, 1670-1760*

**Wednesday, September 23**
Reading:
- René Descartes, *The World* (1630-33) (excerpts)

Week 3
**The Idea of Natural History**

**Monday, September 28**
Reading:
- George-Louis Leclerc, Le Comte de Buffon, *Natural History* (1749-89) (excerpts).

**Wednesday, September 30**
- **Excursion to the Muséum National d'Histoire Naturelle**

Week 4
**French Science and the Dawn of Colonialism**

**Monday, October 5**
Reading:
- Nicholas Dew, *Orientalism in Louis XIV's France* (excerpts); Florence Hsia, *Sojourners in a Strange Land: Jesuits and their Scientific Missions in Late Imperial China* (excerpts)

**Paper #1 Due**

**Wednesday, October 7**

Week 5

**Science in the Revolution, Part I: From Alchemy to Chemistry**

**Monday, October 12**
Reading:

- Antoine Lavoisier, *Essays Physical and Chemical* (1776) (excerpts)

**Wednesday, October 14**

Week 6
**French Science in the World**

**Monday, October 19**
Reading:

- Florence C. Hsia, *Sojourners in a Strange Land: Jesuits and Their Scientific Missions in Late Imperial China.* **Excurision to the Musée des arts et métiers.**

**Wednesday, October 21**

Week 7
**Review & Midterm Exam (Dates and times TBA)**

**Fall Break: October 31st – November 8th**

Week 8
**Evolution and Its Opponents**

**Monday, November 9**
Reading:

- Georges Cuvier, *The Animal Kingdom* (1817) (excerpts); Jean-Baptiste Lamarck, *Zoological Philosophy* (1809) (excerpts).

**Wednesday, November 11 – Armistice Holiday – No classes**

****Friday, November 13 – Make-up session for Armistice****

- **Excursion to the Galerie d'Anatomie Comparée.**

Week 9
**Medicine and Physiology**

**Monday, November 16**
Reading:

- Claude Bernard, *Principles of Experimental Medicine* (1867) (excerpts).

**Wednesday, November 18**

Week 10

**Engineering Science in the 19th Century**

**Monday, November 23**
Reading:
- David I. Harvie, *Eiffel: The Genius Who Reinvented Himself*

**Paper #2 Due**

**Wednesday, November 25**
- **Excursion to the Eiffel Tower. Visit to Eiffel's observatory.**

Week 11
**Science and Science Fiction**

**Monday, November 30**
Reading:
- Cyrano de Bergerac, *The Empires and States of the Moon* (1665) (excerpts);

**Wednesday, December 2**
Reading:
- Jules Verne *From the Earth to the Moon*

Week 12

**Monday, December 7 TBA**

**Wednesday, December 9 TBA**

Week 13
**Review & Final Exam (Dates and times TBA)**