

## SYLLABUS FOR HIS3465: THE SCIENTIFIC REVOLUTION (SPRING 2020)



**CLASS SCHEDULE:** MWF: 12:50–1:40PM in 111 Keene Flint Hall

Professor Anton Matytsin

Office: 230 Keene-Flint Hall

Office Hours: Mondays: 2:00–3:00PM; Wednesdays: 2:00–4:00PM; or by appointment

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**COURSE DESCRIPTION:** This course will explore a period of unprecedented changes in European intellectual culture. Shaken by the encounter with the New World, by a new cosmological perspective, and by the rediscovery of previously unknown ancient sources, European learned society attempted to rethink the very foundations on which its knowledge of the surrounding world rested. The course will begin by looking at the medieval universities and the nascent challenges to Aristotelian philosophy that emerged from the rediscovery of ancient schools of thought. We will explore debates about the proper sources of knowledge in cosmology and natural philosophy that led to a decoupling of religion and science, giving rise to new types of explanations about the structure and origin of the universe.

### **LEARNING GOALS:**

(1) The main goal of this course is to provide students with a complex understanding of the intellectual culture of the seventeenth and early eighteenth centuries. Our aim is to understand the internal logic of a wide spectrum of worldviews and to think in the manner of the authors we are reading. Students will also make sense of the causes and nature of intellectual change.

(2) Students will learn to read primary sources in a critical fashion, seeking to understand how and why the texts they encounter were produced and how they were received both by contemporaneous audiences and by modern historians.

(3) The written assignments will enable students to analyze these primary sources while improving their ability to express ideas and arguments in a clear and convincing fashion.

(4) The discussions will allow students to actively engage with the readings, their professor, and their peers. Students will be asked to argue a variety of perspectives and defend different points of view.

**REQUIRED TEXTS:**

1. Francis Bacon, *Selected Philosophical Writings* (Hackett, 1999) ISBN: 9780872204706
2. Galileo Galilei, *The Essential Galileo* (Hackett, 2008) ISBN: 9780872209374
3. René Descartes, *Philosophical Essays and Correspondence* (Hackett, 2000) ISBN: 9780872205024
4. Thomas Hobbes, *The Leviathan* (Hackett Classics, 1994) ISBN: 9780872201774
5. Margaret Cavendish, *Observations upon Experimental Philosophy* (Hackett Classics, 2016) ISBN: 9781624665141
6. John Locke, *An Essay Concerning Human Understanding* (Hackett Classics, 1996) ISBN: 9780872202160
7. Isaac Newton, *Newton's Philosophy of Nature: Selections from his Writings* (Dover Publications, 2010) ISBN: 9780486445939
8. Nicolas Malebranche, *Philosophical Selections* (Hackett Classics, 1992) ISBN: 9780872201521
9. Pierre Bayle, *The Historical and Critical Dictionary* (Hackett Classics, 1991) ISBN: 9780872201033
10. Julien Offray de la Mettrie, *Machine Man and Other Writings* (Cambridge Texts in the History of Philosophy, 1996) ISBN: 9780521478496
11. G. W. Leibniz, *Discourse on Metaphysics and Other Essays* (Hackett, 1991) ISBN: 9780872201323
12. Baruch Spinoza, *The Essential Spinoza: Ethics and Related Writings* (Hackett, 2006) ISBN: 9780872208032

**ASSIGNMENTS AND EVALUATION:**

Participation and Professionalism (15%)

Two Papers (40%)

Mid-Term Exam (20%)

Final Exam (25%)

**Note:** You must complete all assignments in order to pass the course.

**Grading Scale:**

A = 100–93    B = 86–83    C = 74–71    D = 62–60

A- = 92–90    B- = 82–79    C- = 70–67    D- = 59–56

B+ = 89–87    C+ = 78–75    D+ = 66–63    F = below 55

For more information see: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

**Participation and Professionalism (15%):**

A) Attendance: In the first two classes of each week, I will attempt to introduce the thinker(s) and text(s) we will be reading. I will provide an overview of the political, social, economic, cultural, and intellectual circumstances in which the work(s) in question appeared. In the third meeting of each

week, we will discuss the texts together. You are expected to attend all scheduled meetings, complete all the assigned readings, participate in discussion, and behave in a respectable and collegial manner. You will be permitted **three absences** over the course of the term; every unexcused absence thereafter will **lower your participation grade by one third**. It is also important to arrive to class on time. Punctuality is a show of respect for your instructor and classmates, and it is important not just in class but in a job and your eventual career. Guidelines for excused absences can be found here: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#absencestext>

**B) Readings:** Please come to each discussion having completed the assigned readings for that week. “To complete the readings” means allowing yourself sufficient time both to read through the assigned materials and to think about them. Please bring all assigned readings to class on the day for which the reading has been assigned. It is your responsibility to contact me if you have difficulty locating the reading assignments.

**C) Discussion:** At the start of each week, I will send out a series of questions about the readings in order to frame our discussion. You are encouraged to think of these as you complete the readings. You should be able to provide a **formal two- or three-minute answer** to at least one of the questions if called on. Bear in mind that “active participation” means asking good questions as well as proposing good answers. You are strongly encouraged to bring questions about the readings to class. If one of you had questions or difficulties, others certainly did as well. Active participation is essential for the success of this course.

**Papers (40%):** For the two paper assignments, you will be asked to **compare** and **contrast two or three authors** we read in the course. I will provide you with a selection of possible themes and topics, though you may also write about a subject of your choosing (pending approval). The papers will be due on **Friday, February 21<sup>st</sup>** and **Friday, April 10<sup>th</sup>**, respectively. The essays should be between **1,500** and **2,000 words**, and it should be based on your reading and understanding of the texts. No outside research is required or expected. Your essays will be turned in via the Canvas e-learning website and monitored with the Turnitin Anti-Plagiarism Service.

**Midterm Exam (20%):** The mid-term examination will take place **in class** on **Friday, March 13<sup>th</sup>**. For the midterm, you will be asked to recreate, as faithfully as possible two or three arguments from our readings. These will be arguments that are central to the texts that we read (e.g. Descartes’s first proof of God). You will be evaluated on your knowledge of the texts and your understanding of the internal logic of our authors.

**Final Exam (25%):** The final examination will be held on **Wednesday, April 29<sup>th</sup>, 12:30–2:30PM**. For final exam (as for the midterm), you will be asked to recreate, as faithfully as possible three or four arguments from our readings. You will also write one or two longer essays that address a particular theme. In both cases, you will have plenty of options from which to choose. You will be evaluated on your knowledge of the texts and your understanding of the internal logic of our authors. This exam will be cumulative and may include authors who were on the mid-term.

#### **COURSE POLICIES AND EXPECTATIONS:**

**Extensions and Late Penalties:** The penalty for turning in late assignments is one letter grade (A to B, B to C, and C to D) for each day that the assignment is late. Assignments that are over three days late will not be accepted and will automatically receive an F. Extensions will only be granted in

case of extenuating circumstances, such as documented medical emergencies. **Please note that you must complete all of the assignments in order to pass the course.**

**Classroom Etiquette:** Unless otherwise specified, **computers, tablet devices, and phones are not permitted** in the classroom. Please **refrain from using any electronic devices** during our meetings, as they can be distracting to both you and your fellow classmates. In cases where your readings are available on Canvas, please **print** the readings out and bring them to class.

**Diversity and Inclusiveness in the Classroom:** An open, inclusive environment in the classroom is key to our collective success and is something that the university and I value enormously. I hold myself and each student responsible for fostering a productive learning environment that supports and encourages diversity and inclusiveness. Diversity can include, but is not limited to, race, ethnicity, gender, religion, age, disability, sexual orientation, nationality, and immigration status. Diversity also entails different perspectives, philosophies, and life experiences. I believe that by hearing and learning from a variety of sources and viewpoints, each of us will gain competence in communication, critical thinking, and cultural understanding, as well as an awareness of our implicit biases and how they shape our interactions with others and the world. This will make us better scholars, better citizens, and better people.

**Contact:** The University of Florida requires that you use your UF Gatorlink account for university related e-mail communication. Please see <http://www.it.ufl.edu/policies/#email> to read more on this policy. It is important to check Canvas and your UF e-mail accounts regularly. I will do my best to respond to all course-related emails within 24 hours on weekdays and 48 hours on weekends and during breaks. Please note that if you contact me about an assignment at the last minute, I may not have time to respond. Like most UF faculty, I treat e-mail as a formal means of communication. Your e-mails should be written with a basic greeting (i.e. *Dear, Hello, Hi*, then my name), body, and salutation (i.e. *Thank you, Sincerely, Best*, then your name). Proper grammar is expected.

**Office Hours:** My office hours are **Mondays, 2:00–3:00PM, Wednesdays 2:00PM-4:00PM**, or by appointment. You are highly encouraged to attend office hours at least once during the semester. I would like to get to know each of you individually.

#### **STATEMENT REGARDING ACADEMIC HONESTY:**

Students are expected to uphold the Academic Honor Code of the University of Florida. The Academic Honor Code is based on the premise that each student has the responsibility (1) to uphold the highest standards of academic integrity in the student's own work, (2) to refuse to tolerate violations of academic integrity in the University community, and (3) to foster a high sense of integrity and responsibility on the part of the University community. For a full explanation visit: [www.registrar.ufl.edu/catalog/policies/students.html](http://www.registrar.ufl.edu/catalog/policies/students.html). An excellent website that discusses plagiarism, correct citing of references, and correct use of quotations is: <http://mediasite.video.ufl.edu/mediasite/Viewer/?peid=adaa44500eaf460a84f238e6b9a558f9>.

#### **COURSE EVALUATIONS:**

Students in this class will be participating in the pilot evaluation of the new course evaluation system called GatorEvals. The new evaluation system is designed to be more informative to instructors in order to enhance teaching effectiveness is linked seamlessly to UF's CANVAS learning management system. Students can complete their evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via the web at: <https://ufl.bluera.com/ufl/> Please

note your other classes this semester may be evaluated in the current GatorRater online evaluation system at <https://evaluations.ufl.edu> Thank you for serving as a partner in this important effort.

**UNIVERSITY RESOURCES:**

**Disability Accommodations:** Students requesting accommodation should first register with the Dean of Students Office so that you have documentation for all your courses. For more information about services available to University of Florida students: Dean of Students Office Disability Resource Center, 202 Peabody Hall or 0020 Reid Hall Phone: (352) 392-1261/(352) 392-8570 or at: <http://www.dso.ufl.edu/drc/>

**UF Counseling and Academic Resources:** On-campus services are available for students having personal problems or lacking clear career and academic goals. They include:

1. U Matter, We Care: If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) or (352) 392-1575 so that a team member can reach out to the student.
2. University Counseling Center, 301 Peabody Hall, (352) 392-1575,
3. Student Mental Health, Student Health Care Center, (352) 392-1171
4. Sexual Assault Recovery Services (SARS), Student Health Care Center, (352) 392-1161
5. Career Resource Center, Reitz Union, (352) 392-1601 <http://www.crc.ufl.edu/>
6. E-learning technical support: (352) 392-4357/ email: [Learningsupport@ufl.edu](mailto:Learningsupport@ufl.edu)  
<https://lss.at.ufl.edu/help.shtml>.
7. Library Support, <http://cms.uflib.ufl.edu/ask>
8. Writing Studio, 302 Tigert Hall, (352) 846-1138 <http://writing.ufl.edu/writing-studio/>

**WEEKLY TOPICS AND READING ASSIGNMENTS:**

Note: Readings Marked as (C) are available for download on Canvas

**WEEK 1 (JANUARY 6–10): INTRODUCTION**

Readings: Thomas Aquinas, *On Being and Essence*, 227–249 and *The Five Ways* 1–4 (C)

**WEEK 2 (JANUARY 13–17): CHALLENGING THE PRESUMPTIVE AUTHORITY OF THE PAST**

Readings: Francis Bacon, *Selected Philosophical Works*, 4–9, 31–36, 44–55, 86–133, 145–148

**WEEK 3 (JANUARY 20–24): REVOLUTIONS IN THE HEAVENS**

Readings: Nicolaus Copernicus, “Dedication to Paul III” in *De revolutionibus orbium coelestium* (C); Galileo Galilei, *The Essential Galileo*, 45–59, 63–67, 109–145, 185–192, 267–271

**WEEK 4 (JANUARY 27–31): COGITO ERGO SUM: DESCARTES’S EPISTEMOLOGY**

Readings: René Descartes, *Philosophical Essays and Correspondence*, 46–56, 60–73, 97–141

**WEEK 5 (FEBRUARY 3–7): TWO-SUBSTANCE METAPHYSICS: CARTESIAN DUALISM**

Readings: René Descartes, *Philosophical Essays and Correspondence*, 30–43, 222–246, 253–272, 297–315; *Correspondence between Princess Elisabeth of Bohemia and René Descartes*, 1–13 (C)

**WEEK 6 (FEBRUARY 10–14): EMPIRICISM, MATERIALISM, AND DETERMINISM**

Readings: Thomas Hobbes, “Objections” in René Descartes, *Philosophical Essays and Correspondence*, 167–176; Thomas Hobbes, *The Leviathan*, 3–100, 106–110, 136–145

**WEEK 7 (FEBRUARY 17–21): RADICAL CARTESIANISM**

Readings: Nicolas Malebranche, *Philosophical Selections*, 3–59, 147–167

**PAPER ONE DUE FRIDAY, FEBRUARY 21 AT 4PM**

**WEEK 8 (FEBRUARY 24–28): CRITIQUES OF THE NEW PHILOSOPHY**

Readings: Margaret Cavendish, *Observations upon Experimental Philosophy*, 3–82

No Class, Friday, February 28<sup>th</sup>: Enjoy Spring Break!

**WEEK 9 (MARCH 9–13): SPINOZA’S PANTHEISM**

Readings: Baruch Spinoza, *The Essential Spinoza*, 3–60, 143–161, 191–215

**MIDTERM EXAM IN CLASS ON FRIDAY, MARCH 13<sup>th</sup>**

**WEEK 10 (MARCH 16–20): ENGLISH EMPIRICISM**

Readings: John Locke, *An Essay Concerning Human Understanding*, 1–78, 117–129, 138–147, 192–195, 235–246, 250–257

No Class, Friday, March 20<sup>th</sup>

**WEEK 11 (MARCH 23–27): NEWTONIAN PHYSICS**

Readings: Isaac Newton, *Newton’s Philosophy of Nature*, 3–29, 41–67, 99–112, 116–134; *Newton: Texts, Backgrounds and Commentaries*, 301–308, 342–356 (C)

**WEEK 12 (MARCH 30–APRIL 3): SKEPTICISM AND SCIENCE**

Readings: Pierre Bayle, *The Historical and Critical Dictionary*, 124–139, 144–153, 166–209, 288–316, 350–358, 409–420

**WEEK 13 (APRIL 6–10): LEIBNIZIAN METAPHYSICS**

Readings: Gottfried Wilhelm Leibniz, *Discourse on Metaphysics and Other Essays*, 1–81

**PAPER TWO DUE FRIDAY, APRIL 10 AT 4PM**

**WEEK 14 (APRIL 13–17): THE RISE OF MATERIALISM**

Readings: Julien Offray de la Mettrie, *Machine Man and Other Writings*, 3–73, 89–115, 145–173

**WEEK 15 (APRIL 20–22): CONSOLIDATING THE SCIENTIFIC REVOLUTION**

Readings: Voltaire, *Letters Concerning the English Nation*, 44–75 (C); Jean Le Rond d’Alembert, *The Preliminary Discourse to the Encyclopédie*, 3–31, 45–55, 70–97 (C)

**FINAL EXAM ON WEDNESDAY, APRIL 29<sup>TH</sup>, 12:30–2:30PM**