

HIST373-001/101 – Fall 2012
The Rise of Modern Science

Prerequisites: HUM 101 and two (2) from HUM 102, HUM 211, Hum 212, Hist 213 or their equivalents.

Instructor: Lisa Nocks, Ph.D.

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Office Hours Vary by Semester. Please see Moodle.*

** Additional hours by appointment only*

CATALOG DESCRIPTION: Examines the development of modern science in the western world from the origins of the Scientific Revolution to 1900. Explores how science challenged the revealed universe of Christianity, changed the curriculum in schools and universities, and altered the world view of philosophers. This course covers the achievements of Copernicus, Galileo, Newton, Darwin, Einstein, and other leading scientific innovators, but it also weaves the expansion of scientific knowledge into the larger fabric of European intellectual history.

SEMESTER OVERVIEW: We consider the motives for scientific inquiry, practical application, and a number of questions about the social history of science.

COURSE OBJECTIVES: As a result of engaging in reading and discussion, students will:

- Be able to identify and describe the historical basis of current developments in the sciences.
- The ability to distinguish rumor from evidence relevant to scientific inquiry, such as the difference between a theory and an opinion.
- The ability to articulate the influences and social pressures that motivate people to create instruments that measure and explain aspects of the workings of the universe and our world.

OUTCOMES: Successful completion of

- Demonstrate knowledge of key people, concepts and theories in the history of science in oral and written assignments that include:
 - 3- quizzes or two quizzes and one short response paper.
 - class presentation that focuses on a specific issue in the history of science.

REQUIRED TEXTS: (Available to buy or rent from NJIT Bookstore, Amazon.com, B&N.com, Half.com, or the publishers)

1. Jim Al-Khalili. *The House of Wisdom: How Arabic Science Saved Ancient Knowledge and Gave Us the Renaissance*. (Penguin, 2012). ISBN: 978-0143120568. Paperback (**Also available: Kindle book.**) **READ THIS FIRST 3 WEEKS.**

2. John Henry, *A Short History of Scientific Thought*. (Palgrave-MacMillan, 2011). ISBN: 978-0230019430. Paperback. **READ THIS REST OF SEMESTER.**

Available Grades: A B+ B C+ C D F (missing individual assignments: 0)

Point equivalencies: 91-100 (A) ♦ 86-90 (B+) ♦ 80-85 (B) ♦ 76-79 (C+) ♦ 70-75 (C) ♦ 60-69 (D) ♦ <60 (F) ♦ 0 (no credit)

Grade distribution:

Class presentation 20% (TBA)

Attendance and participation* 20% (10% for attendance, 10% for participation in discussions) *

Quizzes 60% (3 quizzes [or 2 quizzes and one response paper]- 20% each)

Total** 100%

***ABOUT ATTENDANCE AND PARTICIPATION:** You will neither enjoy nor reap the full benefit of this course without regular attendance and participation, which comprises:

- Arriving on time and not leaving early

- Participating in discussions *for which you have also done the reading*
- Completing assigned class activities including Moodle forums
- Not working on other course assignments or email during class...that's just rude.

This means you may earn A's on your class work but receive a B for the course because you failed to contribute anything to class discussions or were absent for others' presentations. ***See me immediately about extenuating circumstances.***

ABOUT CLASS DISCUSSIONS: Lively discussions always make a course more interesting.

- **You are encouraged to bring to class relevant articles or news to share with the class or to post on Moodle.**
- One objective of a college education is to learn to think critically and analytically, and to express your thoughts clearly. This takes practice.

NOTE: *Provided that you are respectful to your classmates and instructor, you are welcome to contribute to all class discussions. It is not necessary to agree with your teacher or classmates to contribute to discussions; disagreeing does not lower your grade. Failure to participate does affect your grade.*

UNEXCUSED LATE ASSIGNMENT SUBMISSIONS: Grade reduced ½ step for each 48 hours after due date. (e.g.: earned: B=Grade posted: C+) **This includes absence when you are scheduled for a class presentation.**

EXCUSED ABSENCES: To receive an excused absence, you must provide appropriate documentation when you return from your absence; otherwise your absence is not excused. 2 unexcused absences results in the loss of a grade (e.g. Final grade earned: A/Posted Grade: B) **Leaving the area early for Thanksgiving or other holiday breaks is not excused.)**

Examples of Documentation:

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- A doctor's note (prescriptions and appointment cards do not count.)
- A copy of an employer's memo to you noting the day/time of event requiring you to miss class.
- An email to me directly from another instructor or advisor explaining why it is necessary to miss my class and noting the day/time of class to be missed.
- A document that authenticates your required absence to attend a funeral.
- Proof of military deployment.

NJIT HONOR CODE: A significant element in your professional and personal development is honesty and integrity. Following the guidelines of the Academic Honor Code of NJIT is good practice. **Turning in a paper that includes plagiarism, or that is written by someone else and represented to be yours, or cheating on an examination will result in an F grade for the assignment and possibly for the semester, as well as your incurring administrative sanctions.**

You are required to turn in a signed academic integrity pledge for this course by the end of the add/drop period. (See handout on Moodle.) You will post final written assignments to Turnitin. Directions will be provided.

HOUSEKEEPING:

- Please **turn cell phone ringers off or to vibrate.** Turn off any other electronic equipment that makes noise before entering class. If you get an emergency call, please quietly leave the room.
- Please be considerate of others who use the classroom after us, and **remove all papers and food/beverage containers you brought in** when you leave.
- **If I must cancel class meeting:** I will let you know ahead of time, OR I will contact the History department secretary and post a message. **ALSO: check Moodle and email before class for emergency cancellations.**
- **If I am not present at class time:** WAIT a FULL 15 minutes, *then* take attendance; leave after 20 minutes. Leave attendance sheet in my mailbox in the history department office in Cullimore Hall.
- **Please only use your laptop for this course during class meetings** (I may sometimes ask you to use your laptop in class for relevant exercises.)

Have a productive and fun semester!

* I reserve the right to alter assignments and exam dates to accommodate the progress of the class. Updates/changes will be announced in class and will be posted on Moodle.

Calendar

Access Moodle regularly for modifications.

HIST 373 Section 001 meets Mondays from 1 to 3:55 PM in Cullimore 111.

HIST 373 Section 101 meets Saturdays from 9 to 11:55 AM in Cullimore 111

Week	Date	Meeting Description	Read for following week*
1		Course Intro/Syllabus Review	House of Wisdom –Intro-ch 2
2		Antiquity to the Renaissance	House of Wisdom -continue
3		Scientific Revolution	House of Wisdom - continue
4		QUIZ 1	Begin Short History...Science
5			Presentations begin - tentative
6			
7			
8			
9		QUIZ 2	
10			
11			
12		NOTE: Class meets on Tuesday	No class 11/22 (Thanksgiving)
13			
14		QUIZ 3 – Final class meeting	

Dec. 12	NJIT/Rutgers Classes End
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Dec. 13	NJIT Reading Day
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Dec. 14-20	NJIT Final Exam period
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Quiz dates may be changed depending on the progress of the class.
Changes will be announced in class and posted on Moodle