

History 101D: World History of Science

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Instructor's In-person Office Hours: Wednesday 1-2 PM, 536 Humanities 1

Zoom office hours available upon request

Welcome to HIS-101D!

Since the beginning of Eurasia's long history and vast space, human curiosity and inquiry have changed widely. This course will examine how three significant civilizations (China, Islam, and Judeo-Christian) framed their curiosity and inquiry from 1200 to 1800. Most people lived in an agrarian society and a political hierarchy of various types during this period. The world was different from our industrial and even post-industrial world. It will require quite a bit of imagination to venture into their world: Why and how did they observe the sky, track the movement of the Sun, draw maps, make tools, make weapons, heal the sick, preserve and transmit their achievements?

We will examine a small segment of the elite population in each complex society throughout Eurasia. In Eurasia (1300-1800), the elite members could recognize their differences in dress, linguistic systems, and political importance. They could identify their privileged position in society more quickly and firmly than their dresses or languages when they traveled to another society in an alien civilization. Their political roles were way more important than their cultural and linguistic ones. Chinese scholars are at the top of the social hierarchy and speak a national language called Mandarin with limited proficiency in local dialects. Missionaries who traveled to China in the 1600s and learned to read classical Chinese and speak Mandarin, for example, were quickly identified as "masters."

Furthermore, Europe's superiority in science, technology, and medicine, as we know it today, wasn't yet apparent across Europe. Both in the history of science and global history, the dominant narrative is about the Scientific Revolution in Western Europe and its rise in the West. As we will learn, the Judeo-Christian world's elite members viewed the East as the land of wisdom and wealth. This course challenges the conventional notion of the rise of the West and examines how far we can trace European superiority (industrial and scientific) back to history.

We will read only one book: Huff, Toby E. *The Rise of Early Modern Science*. Cambridge: Cambridge University Press, 2017. This book contains ten chapters. Each week, we read one chapter and use Hypothes.is to annotate the chapters.

Assignment:

1. Quizzes (30%)

The quiz will consist of ten questions and 10 points, and you will have 20 minutes to complete the quiz. Take your time. During your quiz, you are permitted to consult your readings.

There will be three attempts in each quiz. Your quiz will consist of 10 questions randomly drawn from a quiz bank of 20 questions on each attempt. Therefore, you will likely encounter different questions during your second and third attempts. You may use

these attempts to earn your satisfaction score. We will record the average score of all your attempts so that each attempt counts.

2. Social Annotations (40%)

We will use a social annotation tool called hypothes.is. As this tool is already embedded in Canvas, you do not need to install it.

1. Annotation as Gloss

You should look up difficult words or obscure allusions in a text and share their research as annotations. You should look up at least four words or allusions. Think of the activity as creating a kind of inline Wikipedia on top of your course reading. For complex texts, sharing the burden of the research necessary for comprehension can help students better understand their reading. And something is compelling about students beginning to imagine themselves as scholars, responsible for guiding an audience through a text, whether their peers or a broader intellectual community.

2. Annotation as Question

You should highlight, tag, and annotate four passages you find confusing. An annotation need not be and often is not an answer. A simple question mark in the margin of a book can flag a word or passage for discussion. And such discussions can be generative of critical explication and analysis. The instructor will not respond to such student annotations. Instead, any of your classmates should engage and respond to each other's questions.

3. Annotation as Summary

Students should summarize four arguments at work. Students should select a few paragraphs or even an entire section in close reading and identify a substantive and summative argument in their selection. It would be best if you summarized this argument succinctly. What does an author try to deliver? What components does the author use to build his argument? What evidence does the author use? How persuasive is the author's argument?

4. Annotation as Critical Engagement

Students should select and respond to four different classmates' questions. Although we would love to have completely accurate responses, students should not feel the need to provide "correct" answers. Students should engage the questions by, for example, extending the question to more detailed questions, retorting the questions, agreeing or challenging the premise of the question, or reversing the questions.

This is not your social media posting. In contrast to those who post their opinions recklessly on social media without providing concrete evidence to support their claims, we expect the practice of Social Annotation to demonstrate academic integrity. How do we annotate? Here are some tips:

Your comments should include Clarification, Remarks, and Responses to other students' comments.

When clarifying a concept, do NOT merely copy it from an online dictionary. Please explain why this term or concept helps you better understand the context or argument.

When citing information from others, you must provide a reference (including the author's name, article/book title, and page number, if applicable) and an external link to acknowledge the authors' intellectual effort.

3. Story Maps Term Project (30%)

With the help of a Story Maps platform, you can curate information with photos and locations to tell a unique story about the intersection of places and culture. This project will push you to rethink and approach historical scholarship in a new way—as it relates to geographic location and chronological thinking. You may log in to ArcGIS Online/StoryMaps using UCSC Gold.

We offer optional video quizzes (extra credits) to help you excel in this course. A total of ten weeks' worth of video quizzes will add 5% to your final grade. If you complete all the video quizzes and do well, you should be able to add 4 to 5 percent to your final grade. If your final grade exceeds 100%, I will consider you a grade of A+. If you fail a few quizzes or the story maps project, the extra credits will be helpful at the end of the summer.

Late policy:

If you miss the assignment, Canvas will assign zero to the missing assignment. Canvas will automatically deduct 10% each day if your assignment is late. The lowest grade for a late assignment, which should be better than a missing assignment, is 10% of each assignment's total points.

Collapse All

View Progress

+ Module



⋮	▼ Introduction	✓	+	⋮
⋮	<u>Start here!</u>	✓		⋮
⋮	<u>Campus resources</u> (https://sites.google.com/ucsc.edu/campusresources)	✓		⋮
⋮	<u>How to succeed in this (and any) course</u>	✓		⋮
⋮	<u>Guidelines for communication & academic integrity</u>	✓		⋮
⋮	<u>Using Hypothesis</u>	✓		⋮

⋮	▼ Week 1: Comparative Study of Science	Complete All Items	✓	+	⋮
⋮	<u>DISCUSS: Introduce yourself!</u> View	✓		⋮	
⋮	<u>LECTURE: Civilization as a Unit of World History</u>	✓		⋮	
⋮	<u>Video Quiz: Civilization as a Unit of World History</u> Sep 28 3 pts	✓		⋮	
⋮	<u>LECTURE: Biological Old Regime</u>	✓		⋮	
⋮	<u>Video Quiz: Biological Old Regime</u> Sep 28 3 pts	✓		⋮	
⋮	<u>READ and ANNOTATE: Comparative Study of Science</u> Sep 28 20 pts	✓		⋮	
⋮	<u>QUIZ: Comparative Study of Science</u>	✓		⋮	

Sep 30 | 10 pts

Will unlock Sep 17 at 12am

⋮ ▾ **Week 2: Arabic Science and the Islamic World**

Prerequisites: Week 1: Comparative Study of Science

Complete All Items

✓ + ⋮

⋮   **WATCH: Complex Societies**

✓ ⋮

⋮  **Video Quiz: Complex Societies**

Oct 5 | 3 pts

✓ ⋮

⋮   **LECTURE: Science & Civilizations**

View

✓ ⋮

⋮   **Video Quiz: Science & Civilizations**

Oct 5 | 3 pts

✓ ⋮

⋮   **LECTURE: Solar Movement & Mecca**

✓ ⋮

⋮   **Video Quiz: Solar Movement & Mecca**

Oct 5 | 3 pts

✓ ⋮

⋮  **READ and ANNOTATE: Arabic Science and the Islamic World**

Oct 5 | 20 pts

✓ ⋮

⋮   **QUIZ: Arabic Science and the Islamic World**

Oct 7 | 10 pts

✓ ⋮

Will unlock Sep 30 at 12am

⋮ ▾ **Week 3: Philosophy, Science, and Civilizational Configurations**

Complete All Items

✓ + ⋮

⋮   **LECTURE: Intro to Celestial Sphere**









View

✓ ⋮










⋮   **Video Quiz: Intro to Celestial Sphere**







Oct 12 | 3 pts

✓ ⋮









⋮	  <u>LECTURE: Eurasian Cosmology & East Asian Mathematics</u>	✓	⋮
⋮	 <u>Video Quiz: Eurasian Cosmology & East Asian Mathematics</u> Oct 12 5 pts	✓	⋮
⋮	  <u>LECTURE: Scientific Revolution and Catholic Church</u>	✓	⋮
⋮	 <u>Video Quiz: Scientific Revolution and Catholic Church</u> Oct 12 5 pts	✓	⋮
⋮	 <u>READ and ANNOTATE: Philosophy, Science, and Civilizational Configurations</u> Oct 12 20 pts	✓	⋮
⋮	 <u>QUIZ: Philosophy, Science, and Civilizational Configurations</u> Oct 14 10 pts	✓	⋮

Will unlock Oct 7 at 12am

⋮	▼ Week 4: The European Legal Revolutions Prerequisites: Week 3: Philosophy, Science, and Civilizational Configurations	Complete All Items	✓	+	⋮
⋮	  <u>LECTURE: How Big Is Our World?</u> View	✓	⋮		
⋮	 <u>Video Quiz: How Big Is Our World?</u> Oct 19 5 pts	✓	⋮		
⋮	  <u>LECTURE: Solar Movement & East Asia</u>	✓	⋮		
⋮	 <u>Video Quiz: Solar Movement & East Asia</u> Oct 19 5 pts	✓	⋮		
⋮	  <u>LECTURE: Solar Movement & Cathedrals</u>	✓	⋮		
⋮	 <u>Video Quiz: Solar Movement & Cathedrals</u> Oct 19 5 pts	✓	⋮		

⋮	 <u>READ and ANNOTATE: The European Legal Revolution</u>	Oct 19 20 pts	✓	⋮
⋮	 <u>QUIZ: The European Legal Revolution</u>	Oct 21 10 pts	✓	⋮
⋮	 <u>WATCH: How to use StoryMaps</u>		✓	⋮
⋮	 <u>WATCH: Remember to publish your StoryMaps to UCSC</u>		✓	⋮
⋮	 <u>READ: Finding & Evaluating Sources for Story Maps</u>		✓	⋮
⋮	 <u>Term Project: Short Story Maps Assignment</u>		✓	⋮

Will unlock Oct 14 at 12am

⋮	▼ Week 5: Madrasas and the Transmitted Sciences	Prerequisites: Week 4: The European Legal Revolutions	Complete All Items	✓	+	⋮
⋮	 <u>SLIDE LECTURE: Territorial Empires & Borders</u>	View	✓	⋮		
⋮	 <u>Video Quiz: Territorial Empires & Borders</u>	Oct 26 5 pts	✓	⋮		
⋮	 <u>WATCH: Manuscripts & Books</u>		✓	⋮		
⋮	 <u>Video Quiz: Manuscripts & Books</u>	Oct 26 5 pts	✓	⋮		
⋮	 <u>WATCH: Ocean-going Ships</u>		✓	⋮		
⋮	 <u>Video Quiz: Ocean-going Ships</u>	Oct 26 5 pts	✓	⋮		
⋮	 <u>READ and ANNOTATE: Madrasas and the Transmitted Sciences</u>	Oct 26 20 pts	✓	⋮		
⋮	 <u>QUIZ: Madrasas and the Transmitted Sciences</u>		✓	⋮		



Oct 28 | 10 pts



Will unlock Oct 21 at 12am

▼ **Week 6: Universities and the Institutionalization of Science**

Prerequisites: Week 5: Madrasas and the Transmitted Sciences

Complete All Items



WATCH: Scientific Ideas Traveled across Eurasia



Video Quiz: Scientific Ideas Traveled across Eurasia

Nov 2 | 5 pts



LECTURE: Global Trade & Luxury Goods



Video Quiz: Global Trade & Luxury Goods

Nov 2 | 5 pts



LECTURE: Sexed Bodies & Disorder



Video Quiz: Sexed Bodies & Disorder

Nov 2 | 5 pts



READ and ANNOTATE: Universities and the Institutionalization of Science

Nov 2 | 20 pts | View



QUIZ: Universities and the Institutionalization of Science

Nov 4 | 10 pts



Will unlock Oct 28 at 12am

▼ **Week 7: Science and Civilization in China**

Prerequisites: Week 6: Universities and the Institutionalization of Science

Complete All Items



Term Project: Short Story Maps due

Nov 7 | 25 pts




WATCH: Gunpowder Empires in East Asia











		<u>Video Quiz: Gunpowder Empires in East Asia</u> Nov 9 5 pts		
		<u>WATCH: How Do We Measure the Success of Civilizations?</u>		
		<u>Video Quiz: How Do We Measure the Success of Civilizations?</u> Nov 9 5 pts		
		<u>WATCH: Silver & Copper</u>		
		<u>Video Quiz: Silver & Copper</u> Nov 9 5 pts		
		<u>READ and ANNOTATE: Science and Civilizations in China</u> Nov 9 20 pts View		
		<u>QUIZ: Science and Civilisation in China</u> Nov 11 10 pts		
		<u>Term Project: Long Story Maps assignment</u>		

Will unlock Nov 4 at 12am

	Week 8: Education, Examinations, and Neo-Confucianism Prerequisites: Week 7: Science and Civilization in China		Complete All Items			
		<u>WATCH: Making Weapons</u>				
		<u>Video Quiz: Making Weapons</u> Nov 16 5 pts				
		<u>WATCH: Houses & Palaces</u>				
		<u>Video Quiz: Houses & Palaces</u> Nov 16 5 pts				
		<u>WATCH: Gourmet Food</u>				



⋮	 <u>Video Quiz: Gourmet Food</u>	Nov 16 5 pts	✓	⋮
⋮	 <u>READ and ANNOTATE: Education, Examinations, and Neo-Confucianism</u>	Nov 16 20 pts View	✓	⋮
⋮	 <u>QUIZ: Education, Examinations, and Neo-Confucianism</u>	Nov 18 10 pts	✓	⋮


Will unlock Nov 11 at 12am


⋮	▼ Week 9: Poverties and Triumphs of Chinese Science			
	Prerequisites: Week 8: Education, Examinations, and Neo-Confucianism		Complete All Items	✓ + ⋮
⋮	 <u>WATCH: The "Chinese Science?"</u>		✓	⋮
⋮	 <u>Video Quiz: The "Chinese Science?"</u>	Nov 23 5 pts	✓	⋮
⋮	 <u>LECTURE: Mortality & Mortal Remains</u>		✓	⋮
⋮	 <u>Video Quiz: Mortality & Mortal Remains</u>	Nov 23 5 pts	✓	⋮
⋮	 <u>SLIDE LECTURE: Human Body & Violence in the Early Modern World</u>		✓	⋮
⋮	 <u>Video Quiz: Human Body & Violence in the Early Modern World</u>	Nov 23 5 pts	✓	⋮
⋮	 <u>READ and ANNOTATE: Poverties and Triumphs of Chinese Science</u>	Nov 23 20 pts View	✓	⋮
⋮	 <u>QUIZ: Poverties and Triumphs of Chinese Sciences</u>	Nov 25 10 pts	✓	⋮


Will unlock Nov 18 at 12am

☰ **Week 10: The Rise of Modern Science** ✔ + ⋮
Prerequisites: Week 9: Poverties and Triumphs of Chinese Science Complete All Items

☰   **WATCH: Max Weber and the Rise of the West** ✔ ⋮ -



☰  **Video Quiz: Max Weber and the Rise of the West** ✔ ⋮ -
Nov 29 | 5 pts

☰  **READ and ANNOTATE: The Rise of Modern Science** ✔ ⋮ -
Nov 30 | 20 pts | View

☰  **QUIZ: The Rise of Modern Science** ✔ ⋮ -
Dec 2 | 10 pts

Will unlock Nov 25 at 12am

☰ **Long Story Maps Project Due** ✔ + ⋮

☰   **Term Project: Long Story Maps due** ✔ ⋮ -
Dec 2 | 50 pts