#### History of Disease and Epidemiology

The recent COVID 19 pandemic shuttered businesses and led to worldwide orders that people stay at home. Yet, even as the death toll rose and medical systems strained in cities from New York to Rome to Wuhan, there were some who doubted the necessity of such stay-at-home orders or who argued that the cure was worse than the disease. The debate over the origin and best way to combat the pandemic has become tightly connected to politics and cultural biases.

As this recent example demonstrates, even in the twenty-first century the nature of disease and how to prevent it is not merely a matter of science, but an issue laden with cultural, political, and religious concerns. This course will chart the history of disease both as a subject of scientific inquiry and a cultural and religious phenomenon. We will begin by providing a solid background in both the historical and scientific concepts related to disease, before moving on to discuss major outbreaks in World History including the Black Plague, Cholera, Syphilis, Influenza, and, of course, COVID 19.

#### **Teaching Team**

This course is interdisciplinary in nature and so is taught by two professors and two teaching assistants. The teaching team will be:

• **Brad Bouley**, Associate Professor, History Department, Office Hours T 12-2 pm, email: bouley@ucsb.edu

**John Latto**, Teaching Professor, Department of Ecology, Evolution and Marine Biology, Office hours via Zoom (<u>https://ucsb.zoom.us/j/8427932897</u>) M 4-5, F 1-2 or by appointment, email jlatto@ucsb.edu

TA: Giulia Giamboni giulia giamboni@ucsb.edu Office Hours or by appointment

• **TA: Molly Hardesty Moore**, <u>mhardestymoore@ucsb.edu</u>, Office Hours or by appointment.

# **Digital Formats**

Due to the disruption of the Coronavirus, this course will consist both of online elements and virtual meetings via Zoom.

• Internet Access: Remote learning requires, of course, an internet connection. Please contact the course instructors immediately if you find that you are unable to or have irregular access to the internet.

• **GauchoSpace**: We will post the necessary background videos, assignments, videos, zoom meetings, etc. on Gauchospace. I will also set up the required forums for you to post your written and video responses.

• **Zoom:** We will meet with small groups of you (fifteen at a time) on Zoom, which will serve as in-class discussions. We will meet three or four days a week, depending on the week.. We will ask you to sign up for one of three groups:

# Group 1Meets TWR and (week 3) F 2:00-3:15Group 2Meets TWR and (week 3) F 3:15-4:30

By Monday August 2, you will be asked to sign up for a group meeting time. You will keep this time for the rest of term.

# **Class Policies:**

**1.** *Participation:* Online meetings are difficult, especially with numbers greater than 5. Therefore your participation will be fundamental to the success of the course. Your grade also depends on it: To pass, you need to do all of the assignments. If you miss more than three of the Zoom meetings without a valid excuse, you will fail the course. We understand that you may face challenges in online instruction but it is important that you communicate these challenges to use as soon as possible

2. *Student Conduct Code:* Students should understand and follow the Student Conduct Code. If you are unfamiliar with it, please consult <a href="http://judicialaffairs.sa.ucsb.edu/CMSMedia/Documents/CodeofConduct2012.pdf">http://judicialaffairs.sa.ucsb.edu/CMSMedia/Documents/CodeofConduct2012.pdf</a>

**3.** *Plagiarism*: Plagiarism will not be tolerated in this class. We will follow the sanctioning guidelines presented here

http://judicialaffairs.sa.ucsb.edu/CMSMedia/Documents/Procedures%20Dealing%20with%2 0Academic%20Dishonesty.pdf

If you have any questions or concerns about how to cite sources, what needs to be cited, what is common knowledge etc then please ask.

**4.** *Disabilities*: The University of California and we welcome students with disabilities into the University's educational programs and are happy to make appropriate accommodations. If anyone in this course has a disability, please let us know and contact the Disabled Students Program (DSP) at 805-893-2668, DSP.Help@sa.ucsb.edu, or visit <u>http://dsp.sa.ucsb.edu/</u> for additional information.

**5.** *Zoom etiquette*. Please dress for your Zoom meetings as if you were going to class. Make sure your video is on, you are some place where you can have a discussion, and that you have the readings at hand. Please pay attention and contribute. With groups of over a dozen it is generally better to keep your microphone muted until you want to speak - but this is just a guideline. We reserve the right to count you as absent if you fail to observe proper decorum in a Zoom meeting.

# <u>Assignments</u>

The grade break-down will be as follows

Three short writing assignments (3 pages each)

Quizzes		2 x 5% =	10%
Attendance and participation			15%
Press Release for Final Paper			10%
Final Paper	S		35%

The writing assignments and quizzes are described during the weeks that they are due. Please see document in GauchoSpace describing the final paper

# Course Schedule [Potentially subject to change]

All texts will be posted to GauchoSpace unless otherwise indicated

#### Week 1: Historical Foundations

**Watch:** All lectures embedded in the image of the early modern hospital as well as Bouley's mini lecture on the readings.

Quiz: Take quiz on lecture content

Prior to T (8/3)	Read	<ul> <li>Cunningham, <i>Identifying Disease in the Past</i></li> <li>We will also discuss images of disease in posters and art in the past</li> </ul>
Prior to W (8/4	) Read	<ul> <li>Snowden, <i>Epidemics and Society</i>, Chapter 2: Humoral Medicine</li> <li>Thucydides, <i>History of the Peloponnesian War</i>, section on the Plague of Athens</li> </ul>
R (8/5)	Read	• Procopius, <i>History of the Wars</i> , section on The Justinian Plague
	the following on <b>pandemics in</b>	riting assignment due: In a 3 page response please answer question: do you see any similarities in the presentation of this week's sources and the unfolding of the COVID-19 2020-2021? Please use at least two sources from this week's

readings in your answer. A rubric has been posted on GauchoSpace which will help guide you in writing this assignment.

#### Week 2: The Science of Diseases

Watch: Ep	Epidemiology: the basics		
Watch: Ev	Evolution: for epidemiologists		
Watch Im	Immunology: ELI5		
Quiz: Tal	Take quiz on lecture content		
Prior to T (8/10)	Read: How are people being infected with COVID-19? https://www.livescience.com/how-covid-19-spreads-transmission- routes.html		
Prior to W (8/11)	Watch 'The jungle search for viruses' <u>https://www.ted.com/talks/nathan_wolfe_the_jungle_search_for_viruses</u> Read: Where Coronaviruses Come From <u>https://www.the-scientist.com/news-opinion/where-coronaviruses-come-</u>		
from-67011 https://ww	Read: Nobel laureates and science groups demand NIH review decision to kill coronavirus grant w.sciencemag.org/news/2020/05/preposterous-77-nobel-laureates-blast-nih-		
	pronavirus-grant-demand		

Optional: You can review details about the grant here (check out different tabs)

https://projectreporter.nih.gov/project\_info\_description.cfm?aid=9819304&icde=49645

Prior to R (8/12) Watch 'Can we domesticate germs?' https://www.ted.com/talks/paul\_ewald\_can\_we\_domesticate\_germs

# Final paper proposal due by Friday, 8/13.

# Week 3 Cholera

This week we will engage in a Reacting to the Past Simulation in which you will assume characters during a nineteenth-century Outbreak of Cholera. Everyone will have to make a presentation in character, but even on days when you do not present you must participate in the debate.

	Watch:Bouley lectures on Reacting to the Past and Germ Theory
T (8/17)	Read <ul> <li>Intro to Reacting to the Past and your character summary</li> </ul>
	· "Monday, August 28: The Night-Soil Men" In Johnson, SJ (2006).
	• Snowden, Chapter 12,"The Germ Theory of Disease"
	Be prepared to discuss these readings in the zoom meeting
W (8/18)	Be prepared to introduce your character and explain your views on how the handbill (posted on Gauchospace) should be altered.
	At least two members of each team must make a presentation (2-3 minutes) on this issue
R (8/19)	Be prepared to discuss and then vote on whether the Broad Street Pump should be removed.
	Any members of each team, who did not present on Wednesday, must present (2-3 minutes) their arguments about this topic.
F (8/20)	Meet to discuss the aftermath of the Reacting to the Past.
	Week 4 Bubonic Plague and Small Pox
	First Page of Final Paper Due Monday August 23
	Watch: Bouley lecture on the 1346-51 Black Plague
T(8/24)	Read · Horrox, Selections on the Black Death
	• Bos, K., Schuenemann, V., Golding, G. et al. <i>A draft genome of</i> <i>Yersinia pestis from victims of the Black Death</i> . Nature 478, 506–510 (2011) doi:10.1038/nature10549 (G)
	Be prepared to discuss these sources in class meeting
	Watch: Latto on Small Pox and beginnings of inoculation
W(8/25)	Read · Snowden, Chapter 6-7 on Small Pox

	]	Be prepared to discuss these sources in class meeting
R(8/26)	Read	• Crosby, "The First New World Empire and the Fall of the Great Indian Empires"
		· Motolina's History of New Spain, selection on Small Pox
		• Florentine Codex, selection on Small Pox
	]	Be prepared to discuss this source in class meeting
F(8/27)	1	<b>Second short writing assignment due:</b> Do you think it is more difficult now or in the period of Smallpox to convince people to receive vaccination/variolation? Why?

# Week 5 Syphilis, AIDS, and the Stigma of Disease

# First Five Pages and Outline of Final Paper Due Monday August 30

Watch:	Bouley lecture on Syphilis and the Tuskegee Study		
T (8/31)	Read · Brandt, "Racism and Research"		
W (9/1)	Read • Snowden, Chapter 20 "AIDS in the United States"		
R (9/2)	Please come to class with a paragraph or passage from your final paper that you are concerned about. Please also be prepared to discuss the topic for the third writing assignment.		
F (9/3)	<b>Third short writing assignment due:</b> In your opinion, to what extent is the sort of bias that bedeviled the treatment of the Syphilis and AIDS epidemics present in current perceptions of contagious disease?		

# Week 6 Influenza and COVID 19

- Watch: Bouley lecture on the Spanish Influenza Outbreak
- T (9/7) Please watch the following PBS documentary on the influenza outbreak of 1918 <u>https://www.youtube.com/watch?v=l0juBE-ra3A</u>

# Read Katherine Porter, "Pale Horse, Pale Rider,"

Be prepared to discuss how the history of pandemics can best be conveyed to a wider public

- W (9/8) Presentation of press releases (1)
- R (9/9) Presentation of press releases (2) and final reflections.

Press Release Due 9/9

Final Paper Due 9/11 by 11:59 pm.