

Teaching COVID-19 in a Multidisciplinary Team

Emphasizing Holism and the Relevance of Anthropology

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Summary

The COVID-19 pandemic has resulted in widespread uncertainty in the United States (US) that is partly fueled by a lack of clear, credible information. At institutions of higher education, these factors have led to students seeking clarity about the pandemic, necessitating a holistic approach to teaching about COVID-19's origins and societal impacts. In this article, we show how we responded to students' interest in understanding COVID-19 through a multidisciplinary, short-term COVID-19 course that ultimately imparted to students the value of a holistic perspective and medical anthropology overall. Our course was led by an eight-person team comprising medical anthropologists, biologists, economists, and humanities scholars, and we taught the course twice during the spring and summer of 2020. In each rendition of our course, we described COVID-19's zoonotic origins; compared COVID-19 to previous pandemics; examined the global financial impacts of COVID-19; and explained the relationship between COVID-19 and longstanding social inequities in the US that underlie health disparities, with particular attention to racial inequality. We organized the course to feature a combination of scholarly and popular sources, and structured the course around the disciplinary expertise of the collaborators while intentionally creating deep transdisciplinary learning through a novel component that we called "corona hour." Through this course, we showed undergraduate students the importance of a holistic understanding of disease and thereby emphasized the value of an anthropological perspective without teaching an exclusively anthropology course, and also provided each faculty collaborator with a meaningful professional development experience.

Introduction

In the United States, the COVID-19 pandemic has resulted in widespread uncertainty fueled by an inconsistent patchwork of state and federal government responses and a concomitant deluge of information with varying degrees of credibility (Mheidly & Fares 2020). The uncertainty at a national level is mirrored in institutions of higher education, creating a demand among university students to deeply understand the pandemic and its multiple consequences. As faculty at a liberal arts college, we felt compelled to respond to the pandemic in the way we best knew how: by designing a multidisciplinary four week "Coronamester" course that we taught in April and August of 2020—respectively coinciding with several states entering a "lockdown" phase of the pandemic and before our college began its fall semester. Our eight-person faculty team represented disciplines including biology, business, English literature, and medical anthropology. As a team, our course provided students with a holistic understanding of the COVID-19 pandemic that included historical comparisons, understanding its biological origins, assessing its micro and macroeconomic consequences, and highlighting the broader societal implications for vulnerable and marginalized populations. Through this multidisciplinary approach, we ultimately provided students with an understanding of COVID-19 rooted in the core principle of anthropology—holism—without teaching an exclusively anthropological course. This approach resulted in meaningful learning outcomes for students and provided the co-authors a purposeful collaborative professional experience.

The Class: Four Modules and Weekly “Corona Hours”

For our Coronamester course, we designed four modules around our disciplinary foci, each of which lasted one week. The modules included daily reading assignments and a combination of activities such as watching recorded lectures, short videos, and full-length films. Readings included a combination of peer-reviewed sources and popular materials related to the course and intended to be accessible supplements to the assigned peer-reviewed content. In the first iteration of the class, students were assigned to participate asynchronously in daily chat-room style discussions using Microsoft Teams software. In the second version of the class, we required students participate in discussions synchronously during a predetermined time of the day and allowed for discussions to occur via video and text-based chat. The first time we taught the course a total of 149 students enrolled, and the second time we had an enrollment of 61; in each iteration, students represented a variety of majors or intended majors, and the second iteration of the class was reserved for incoming, first-year students.

As part of the course design, we reserved one hour on Friday afternoons for the class’s unique feature: an hour-long discussion session we titled “corona hour.” We organized the corona hour as a townhall style meeting where faculty who designed the modules for the week asked the other instructors questions related to relevant news stories, directly tying in the course content to current events as they unfolded and emphasizing opportunities for interdisciplinary exchange. We also fielded questions from students, allowing them opportunities to ask questions related to breaking COVID-19 news. The corona hours modeled to students what transdisciplinary academic engagement around a particular topic looks like and showed them how to engage in civil dialogue around a contentious topic—a necessity given the heightened political polarization in the US, even around a public health crisis (JIANG *et al.* 2020). Further, the corona hours allowed for a deeply integrative, transdisciplinary, rather than serially interdisciplinary, approach to the course since it synthesized faculty members’ disciplinarily-informed perspectives on a weekly basis.

As students progressed through the course, they completed a summative assessment for each weekly module. In the second iteration of the course, the first three modules also included formative evaluations and a final evaluative assignment asking students to reflect on the course as a whole and what they gained from the multidisciplinary perspective. This reflection assignment provided us an opportunity to determine what students found valuable about the comparative nature of the course.

Course Outcomes

Upon completing our Coronamester courses, we found that students reported a deep understanding of COVID-19 through multiple disciplinary perspectives. As one student succinctly described their learning, “this course made me think about how the pandemic would affect me from every angle. Not just my physical health, but in terms of my mental health, financial stability, and my culture.” Further, some students noted that the course directly piqued their interest in social sciences, including anthropology. This was made possible in part through a deliberate focus on using key academic texts¹ and accessible sources² that aligned practical and theoretical concepts we determined students should have in understanding COVID-19.

The judicious selection of popular sources and films, coupled with a select number of academic and peer-reviewed publications, aided students’ understandings of complex issues related to the pandemic. For example, the team that taught on economic consequences of the pandemic included brief lectures and podcasts that provided a foundational understanding of economic principles needed to assess the financial implications of the pandemic that concerned students starting their college careers, including price gouging and shortages of necessities such as toilet paper (HAMILTON 2020). This approach also allowed for briefly describing the diversity of economic recovery possibilities and potential for governmental intervention that responded to students’ existing understanding of economics and also assuaged some of their personal concerns about future economic prospects.

In some modules, we strategically used lectures and discussions to not only provide founda-

tional knowledge needed to understand COVID-19, but also to make the content approachable. For example, biologists who taught the biological origins of COVID-19 were mindful that for many students in the US, biological sciences are intimidating. Faculty in that unit therefore used the opportunity to teach the students about zoonosis and coronaviruses generally, while also imparting to them lessons on scientific literacy, the processes of rigorous peer review, and how to understand information reported in popular media.

Moreover, through comparing the COVID-19 crisis to previous pandemics, our class fostered a comparative way of thinking. For example, colleagues from the humanities included first-person historical and fictional accounts of living through medieval plagues and the early days of the HIV/AIDS crisis in the US, comparing contemporary reporting on college students' corona parties to medieval festivals described in Edgar Allan Poe's "The Masque of the Red Death." Further, we aimed to ensure students had a timeline of previous pandemics from the late 19th century to present, comparing COVID-19 to the 1918 influenza and showing how pandemics are related to xenophobia and racism. These efforts situated the pandemic in a historical context and also countered some of the political narratives in the US that such a pandemic could have never been anticipated (BLAKE 2020). Additionally, as the COVID-19 pandemic occurred in tandem with renewed and pressing attention on structural racism in the US, we further aimed to emphasize how health disparities related to COVID-19 and other diseases are linked to anti-Black racism and systemic disenfranchisement. This comparative approach rooted in historical awareness emphasized a foundational characteristic of an anthropological perspective.

Lastly, through teaching this course, we as instructors found meaningful value in our work. Non-anthropologist faculty colleagues professed understanding the value of medical anthropology in examining the relationships between health and complex social structures. For example, one of the instructors and co-authors noted that the anthropological perspective of the course allowed them to consider the implications for humanity outside of the biological understanding of disease. As a team, we all expressed a mutual appreciation for having an opportunity to work together

and learn from each other's perspectives. This included learning different pedagogical techniques from one another and personal teaching styles, demonstrating that the course not only had beneficial learning outcomes for students, but also resulted in positive moments of professional development for the faculty involved.

Teaching an Anthropological Perspective but not Anthropology

Overall, our brief, team-taught course successfully fostered core elements of anthropological perspectives among students without teaching an explicitly medical anthropology class. The holistic, comparative, and historically-deep approach to understanding COVID-19, its biological genesis, and its numerous social and economic consequences, fostered anthropological ways of thinking without being an anthropology course. Our approach to teaching COVID-19 was particularly necessary given the national and institutional contexts in which our class was designed. In the US, COVID-19 misinformation continues at the highest levels of government (HATCHER 2020), which may result in broader public confusion and a crisis of trust in public health institutions, necessitating institutions of higher education be sources of clear and robust information for students seeking answers. At our institution, which has a reputation for excellence in teaching business and accordingly attracts students interested in pursuing business degrees, students can easily miss opportunities to take anthropology courses that provide them deep understandings of complex problems, such as a novel communicable disease pandemic. Overall, then, our course points to how medical anthropologists in similar institutional contexts can simultaneously impart anthropological perspectives to students through multidisciplinary, team-taught courses, and also provide important COVID-19 information to students eager to understand the impacts of disease that has disrupted every facet of their lives and lead to numerous types of instability for the unforeseeable future.

Notes

1 For example, we wanted students to think about how the US market-based medical system is partly responsible for inequalities related to COVID 19, so we assigned: RYLKO-BAUER, BARBARA, PAUL FARMER 2002. "Managed care or managed inequality? A call for critiques of market-based medicine." *Medical anthropology quarterly* 16(4): 476–502. When then paired the article with news stories about ventilator shortages due to a supply and demand logic shaping hospital supplies in the US, such as: FELDMAN, AMY 2020. "States Bidding Against Each Other Pushing Up Prices Of Ventilators Needed To Fight Coronavirus, NY Governor Cuomo Says" <https://www.forbes.com/sites/amyfeldman/2020/03/28/states-bidding-against-each-other-pushing-up-prices-of-ventilators-needed-to-fight-coronavirus-ny-governor-cuomo-says/#4a589d27293e>.

2 For example, we paired about racism during pandemics and how Trump administration officials continually refer to COVID-19 as the "China Virus" with a medical anthropological article about the SARS pandemic and the politics of blame in the US. The online periodical was: LEÓN, FELICE 2020. "Your Racism Is Showing: Coronavirus and the Racist History of Pandemics." *The Root* <https://www.theroot.com/your-racism-is-showing-coronavirus-and-the-racist-hist-1842412528>. The academic article we selected was: EICHELBERGER, LAURA 2007. SARS and New York's Chinatown: the politics of risk and blame

during an epidemic of fear. *Social Science & Medicine* 65, 5: 2841295.

References

- BLAKE, AARON 2020. Trump keeps saying "nobody" could have foreseen coronavirus. We keep finding out about new warning signs. *The Washington Post*. <https://www.washingtonpost.com/politics/2020/03/19/trump-keeps-saying-nobody-could-have-foreseen-coronavirus-we-keep-finding-out-about-new-warning-signs/> [November 9, 2020].
- HAMILTON, REBECCA 2020. Scarcity and Coronavirus. *Journal of Public Policy & Marketing* (e-pub ahead of print): doi: 10.1177/0743915620928110.
- HATCHER, WILLIAM 2020. A Failure of Political Communication Not a Failure of Bureaucracy: The Danger of Presidential Misinformation During the COVID-19 Pandemic. *The American Review of Public Administration* 50, 6–7: 614–620.
- JIANG, JULIE, EMILY CHEN, SHEN YAN, KRISTINA LERMAN, EMILIO FERRARA 2020. Political polarization drives online conversations about COVID-19 in the United States. *Human Behavior and Emerging Technologies* 2, 3: 200–211.
- MHEIDL, NOUR, & JAWAD FARES 2020. Leveraging media and health communication strategies to overcome the COVID-19 infodemic. *Journal of Public Health Policy*: 1–11.

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