

Fall 2017
Anthropology of Infectious Disease
ANT 4930 Section 1053 (undergrad)
ANG 6930 Section 105G (graduate student)

Instructor: Dr. Kevin Bardosh, Research Assistant Professor, University of Florida.
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Meeting times and locations:

- Monday (periods 6-7; 12:50-1:40 and 1:55-2:45) at MCCB building room 2102
- Wednesday (period 7; 1:55-2:45) at WEIM building room 1094

Course Description: This course will introduce advanced undergraduate and graduate students to a critical medical anthropology of infectious disease emergence, transmission, prevention and control. The course broadly investigates how complex biosocial interactions influence the natural history of infectious disease and global health efforts to understand and control them. The course will be dynamic, and integrate lectures on a wide range of topics, student workshops (which will include class debates, proposal writing exercises, study designs and critical group reflections) and student-led group presentations. We will focus on contemporary problems and issues, with a strong emphasis on inter-disciplinary thinking, critical theory, social justice and applied anthropology. The first part of the course will explore general theoretical and conceptual trends in anthropological research on the emergence and transmission of infectious disease, including expert and local understandings of infection and spread and broader political economy drivers. The second part will focus on the discourses and biopolitics of medicine and public health. We will explore counter-narratives to the hegemony of science and technology, including the role of local communities and the need to address health inequalities and structural factors, such as water, hygiene, sanitation and housing. Lastly, the course will turn to broader questions of policy and governance, including challenges with vertical initiatives, pharmaceutical markets, disease elimination, disease modeling, and efforts to prevent the next global pandemic. The course will provide a forum for mature students in anthropology, geography, sociology, development studies, public health, medicine and other disciplines to critically reflect on the social and political lives of infectious disease, and to explore pathways for novel anthropological engagement.

Course Objectives:

- Generate conceptual and theoretical insight into the study of infectious disease from a critical anthropological perspective;

- Further student knowledge and learning of how infectious diseases are interwoven into broader social, cultural, political, economic and ecosystem dynamics;
- Further student knowledge and learning on the biopolitics of public health intervention, policies and systems for both endemic and emerging diseases;
- Build insight into the importance of anthropological research as a pathway for health activism and social justice.
- Strengthen practical skills for students in academic journal article analysis, proposal and essay writing, presentation and debate skills and critical self-reflection.

Course Structure:

This course is intended for advanced undergraduate and graduate students from a range of biomedical and social science disciplines. Students are expected to critically engage with the class readings and be actively involved in class discussion. Students are expected to read all of the assigned readings before each class.

The course will integrate instructor lectures with student workshops and student-led group presentations.

There will be 8 student workshops throughout the semester on a range of topics:

1. Outbreak ethnography
2. Stigma and disease
3. Local responses to intervention
4. The production of scientific knowledge
5. Experimental trials
6. The social lives of health workers
7. Disease elimination narratives
8. Future scenario planning

Students are expected to attend all of these workshops and do the assigned reading and other necessary preparations, as noted in the course outline below. Workshops will include proposal writing, debates, critical group discussions and study design preparation. These class activities will be graded.

Students are also expected to help prepare and present one presentation to the class during the semester. Each student will be assigned to one of four class groups for this activity. Groups are expected to arrange meetings outside class time, as needed, to prepare for this presentation. Presentations are expected to be 25 minutes and conclude with one question for a 15-minute class discussion. Each group is required to distribute a 2-page outline of the presentation, with at least 5 references, to the class on the day of the presentation. The presentation topics will include:

1. The role of social science in the Zika epidemic (Sept 13)
2. A critical analysis of a journal article on Buruli Ulcer in Ghana (Sept 23)
3. A discussion about the challenges of community participation, using examples from mosquito control in Cuba and schistosomiasis in Tanzania (Oct 11)
4. What microbe will cause the next global pandemic and why? (Nov 13)

Grading Methods and Evaluation: The assessment will include an evaluation of class exercises during the student workshops, evaluation of the group presentation, evaluation of the essay outline and the final research paper.

1. Student workshop participation = 30%
2. Group presentation = 15%
3. Essay outline = 5% (due Nov 27th)
4. Research paper = 50% (due Dec 10th)

Details include:

1. Student workshops: There will be 8 student workshops. 5/8 will be graded, with each assignment graded at 6% of your total class grade. Assignments will be done in class. Some will be done, and graded, in a group while others will be done, and graded, individually. All assignments will be handed to the instructor at the end of the class.

2. Group presentation: As noted above, each student will be assigned to one of four class groups. The grade for the presentation (10%) will be divided (50/50) between the grade of the instructor for the group (group evaluation) and evaluations regarding the time and effort put in by each student, done by each individual member of the group (individual evaluation).

3. Essay outline: Each student will prepare a research paper. In order to strengthen student skills in essay writing, each student will be expected to write a 2-page essay outline, which will be due at the beginning of class Nov 27th. Each student is expected to come to this class with a copy of the outline. Any student that does not (without an adequate reason) will be penalized the full 10% of their overall class grade. During this class, students will read each others' outlines and provide feedback. Students are expected to (neatly!) edit, change and add to their outline during the class. The instructor will collect the outlines at the end of the class, and the grades will reflect both the original outline and the changes made during the class. Outlines will be promptly given back to students at the next class, Nov 29th.

4. Research paper: Each student will identify a research topic that meets his/her professional goals and objectives, and intersects with the objectives and content of this course. This paper will be between 3,000 and 4,000 words, excluding references and figures. The paper must be sent by email to the instructor on or before the December 10th due date.

All references require parenthetical citations and bibliographic references. The bibliographic material must be submitted in formal APA, MLA, or Chicago Style citation conventions.

If you are aware of any pending conflicts with any of the assignments, please let the instructor and TA know immediately so that alternative accommodations can be made.

Text/Readings: Readings will be assigned from the anthropology, social science and public health literature. Students are expected to find the readings on the internet (UF system or Google scholar search) by themselves. Most readings will be journal articles available online through the UF library system; however, the class also has 3 required textbooks. Students are expected to purchase a copy of these textbooks, used or new, before August 28th.

Required texts include:

1. Biehl, J. and Petryna, A. (eds) (2013) *When People Come First: Critical Studies in Global Health*. Princeton University Press: Princeton
2. Briggs, C. L. and Mantini-Briggs, C. (2003) *Stories in the Time of Cholera: Racial Profiling During a Medical Nightmare*. University of California Press: Berkeley CA.
3. Singer, M. (2015) *Anthropology of Infectious Disease*. Left Coast Press: Walnut Creek, California.

Grading: The grading scale for this course consists of the standard scale below:

90% - 100% = A
85% -89.9% = B+
80% -84.9% = B
75% -79.9% = C+
70% -74.9% = C
65% -69.9% = D+
60% - 64.9% = D
Below 60% = E

Class Attendance: Class attendance is mandatory for students. Excused absences follow the criteria of the UFL Graduate Catalogue (e.g., illness, serious family emergency, military obligations, religious holidays), and should be communicated to the instructor prior to the missed class day when possible. UFL rules require attendance during the first two course sessions, and students also must attend the final two course sessions of student presentations for this class. Missing three scheduled sessions will result in a failure. Regardless of attendance, students are responsible for all material

presented in class and meeting scheduled due dates for class assignments. Finally, students should read all assigned readings prior to the class meetings, and be prepared to discuss the material.

Policy on Make-Up Work: Students are allowed to make up work as the result of illness or other unanticipated circumstances warranting a medical excuse and resulting in the student missing a homework or project deadline, consistent with College policy. Documentation from a health care provider is required. Work missed for any other reason will receive a grade of zero.

Accommodations for Students with Disabilities: Students requiring accommodations must first register with the Dean of Students' Office. The Dean of Students' Office will provide documentation to the student who must then provide this documentation to the faculty member when requesting accommodation. The College is committed to providing reasonable accommodations to assist students in their coursework.

Course Outline and Assigned Readings

Note: All readings are available through the UF system online or a quick google search. Book chapter readings from the 3 assigned class texts are marked with a (*).

August 23: Anthropology of/in Infectious Disease Control

- Introduces competing paradigms for infectious disease research
- Introduces students to critical and applied medical anthropology

Readings:

Harper, I., & Parker, M. (2014). The politics and anti-politics of infectious disease control. *Medical anthropology, 33*(3), 198-205.

Janes, C. R., & Corbett, K. K. (2009). Anthropology and global health. *Annual Review of Anthropology, 38*, 167-183.

Manderson, L. (1998). Applying medical anthropology in the control of infectious disease. *Tropical Medicine & International Health, 3*(12), 1020-1027.

August 28: Biosocial Perspectives on a Pathogenic Planet

- Outlines the variety of pathogens in nature
- Discusses the global burden of infectious disease
- Introduces students to major global initiatives
- Introduces the relevance of a “biosocial approach”

Readings:

- * Singer, M. (2015) *Anthropology of Infectious Disease*. Introduction and Chapter 1 and 2. Pp. 11-100.

August 30: Human Behavior and Infectious Disease

- Explores the role of human behavior in infectious disease transmission
- Discusses risk, exposure, clustering and social difference

Readings:

Aagaard-Hansen J, Claire L: Neglected tropical diseases: equity and social determinants. In *Equity, Social Determinants, and Public Health Programmes*. Edited by Blas E, Anand SK. Geneva: WHO Press; 2010:135–157. Available online at: http://www.who.int/neglected_diseases/Social_determinants_NTD.pdf

Boyce, P., Huang Soo Lee, M., Jenkins, C., Mohamed, S., Overs, C., Paiva, V., & Aggleton, P. (2007). Putting sexuality (back) into HIV/AIDS: Issues, theory and practice. *Global Public Health*, 2(1), 1-34.

September 6: Student Workshop 1 on Outbreak Ethnography (Graded)*

- Introduces the concept of outbreak ethnography
- Student workshop: develop a study design for an outbreak investigation

Readings:

Richards, P., et al. (2015) Social pathways for Ebola virus disease in rural Sierra Leone, and some implications for containment, *PLOS Neglected Tropical Diseases*, vol 9, no 4, doi: 10.1371/journal.pntd.0003567

Hewlett, B., and Hewlett, B. (2008) Outbreak Ethnography. In *Ebola, Culture and Politics*. Pp. 19-36 (available online at: http://anthro.vancouver.wsu.edu/media/PDF/outbreak_ethnography.pdf)

September 11: Inequality 1: Structural Violence

- Introduces the concept of structural violence
- Explores structural violence in relation to the Latin American cholera epidemic of the 1990s

Readings:

- * Briggs, C. and Mantini-Briggs, C. (2003) *Stories in the Time of Cholera*. Introduction and Chapter 1. Pp. 1-47.

Farmer, P. (1996). On suffering and structural violence: A view from below. *Daedalus*, 261-283.

September 13: Inequality 2: Disease Syndemics

- Introduces the concept of disease syndemics
- Group 1 presentation on the role of anthropology in the Global Zika Response

Readings:

* Singer M (2016) Infectious Disease Syndemics. Chapter 6. Pp. 196-224.

Singer, M. (2017). The spread of Zika and the potential for global arbovirus syndemics. *Global public health*, 12(1), 1-18.

September 18: Ethnographies of illness 1: Cultural Epidemiology

- Introduces cultural epidemiology and local illness categories

Readings:

Geissler, P. Wenzel. 1998. 'Worms are our life.' Understandings of worms and the body among the Luo of western Kenya. *Anthropology and Medicine* 5:63-79.

Launiala, A. (2009). How much can a KAP survey tell us about people's knowledge, attitudes and practices? Some observations from medical anthropology research on malaria in pregnancy in Malawi. *Anthropology Matters*, 11(1).

September 20: Student Workshop 2 on Stigma and Disease

- In-depth analysis of research papers in groups.
- Read the 2 papers; come prepared!

Readings:

Ramdas, S., van der Geest, S., & Schallig, H. D. (2016). Nuancing stigma through ethnography: the case of cutaneous leishmaniasis in Suriname. *Social Science & Medicine*, 151, 139-146.

White, C. (2005). Explaining a complex disease process: talking to patients about Hansen's disease (leprosy) in Brazil. *Medical anthropology quarterly*, 19(3), 310-330.

September 25: Vectors and Reservoirs

- Introduces vectors/animals in disease dynamics and related social theories

Nading, A. M. (2013). Humans, animals, and health: From ecology to entanglement. *Environment and Society: Advances in Research*, 4(1), 60-78.

Valdez-Tah, A., Huicochea-Gómez, L., Ortega-Canto, J., Nazar-Beutelspacher, A., & Ramsey, J. M. (2015). Social representations and practices towards triatomines and Chagas disease in Calakmul, Mexico. *PloS one*, 10(7).

September 27: Ecosystems and Health

- Introduces ecosystems approaches to public health, and the implications for anthropology
- Group presentation 2 on the Tschakert *et al.* article. Come prepared.

Readings:

* Singer M (2016) Environmental Disruption, Pluralea Interactions and Infectious Diseases. Chapter 4. Pp. 125-155.

Tschakert, P., Ricciardi, V., Smithwick, E., Machado, M., Ferring, D., Hausermann, H., & Bug, L. (2016). Situated knowledge of pathogenic landscapes in Ghana: Understanding the emergence of Buruli ulcer through qualitative analysis. *Social Science & Medicine*, 150, 160-171.

October 2: Student Workshop 3 on Local Responses to Intervention (Graded)*

- Student workshop on how local people respond to biomedical and preventative interventions
- Case studies include sanitation in Zambia and sleeping sickness in Uganda

Readings:

Bardosh K. (2015) Deadly Flies, Poor Profits and Veterinary Pharmaceuticals: Sustaining the Control of Sleeping Sickness in Uganda. *Medical Anthropology* 34(4): 338-352.

Bardosh, K. (2015). Achieving "Total Sanitation" in Rural African Geographies: Poverty, Participation and Pit Latrines in Eastern Zambia. *Geoforum* 66:53-63.

October 4: Understanding Rumors and Resistance

- Discusses the social, cultural, political and economic basis for rumors and resistance to biomedical interventions
- Introduces comparative ethnography, with a case study on Polio

Readings:

* Briggs, C. and Mantini-Briggs, C. (2003) *Stories in the Time of Cholera*. Chapters 9 and 10. Pp. 199-255.

Closser, S., Rosenthal, A., Maes, K., Justice, J., Cox, K., Omidian, P. A., et al (2016). The global context of vaccine refusal: Insights from a systematic comparative ethnography of the global polio eradication initiative. *Medical anthropology quarterly*, in press.

McGranahan, C. (2016). Theorizing Refusal: An Introduction. *Cultural Anthropology*, 31(3), 319-325.

October 9: The Hegemony of Magic Bullets

- Discusses the continued dominance of technological solutions to infectious disease, with a focus on malaria

* Cueto, M. (2013) A return to magic bullet. In *When People Come First: Critical Studies in Global Health*. Pp. 30-53.

Eckl, J. (2017). The Social Lives of Global Policies against Malaria: Conceptual Considerations, Past Experiences, and Current Issues. *Medical Anthropology*, in press.

October 11: Community Participation and the Social Determinants of Health

- Group presentation 3: on the *Perez et al.* and *Person et al.* articles. Read the Rifkin article, and either *Perez et al.* or *Person et al.*

Readings:

Rifkin, S. B. (1996). Paradigms lost: toward a new understanding of community participation in health programmes. *Acta tropica*, 61(2), 79-92.

Pérez, D., Lefèvre, P., Castro, M., Toledo, M. E., Zamora, G., Bonet, M., & Van der Stuyft, P. (2013). Diffusion of community empowerment strategies for *Aedes aegypti* control in Cuba: a muddling through experience. *Social science & medicine*, 84, 44-52.

Person, B., Knopp, S., Ali, S. M., A'kadir, F. M., Khamis, A. N., Ali, J. N., et al. (2016). Community co-designed schistosomiasis control interventions for school-aged children in Zanzibar. *Journal of biosocial science*, 48(S1), S56-S73.

October 16: Student Workshop 4: The Production of Scientific Knowledge

- Student workshop on the social and political production of scientific knowledge
- Read the articles carefully and come prepared.

Readings:

Allen, T., & Parker, M. (2016). Deworming delusions? Mass drug administration in East African schools. *Journal of biosocial science*, 48(S1), S116-S147.

Biruk, C. (2012). Seeing like a research project: Producing “high-quality data” in AIDS research in Malawi. *Medical anthropology*, 31(4), 347-366.

October 18: Global Vaccine Production

- Examines the role of vaccines in disease prevention and the politics of the vaccine industry

Readings:

Blume, S., & Geesink, I. (2000). Vaccinology: an industrial science?. *Science as Culture*, 9(1), 41-72.

Graham, J. (2016). Ambiguous capture: Collaborative capitalism and the meningitis vaccine project. *Medical anthropology*, 35(5), 419-432.

October 23: Public-Private Partnerships and Profits

- Introduces the rise of public-private partnerships in global health
- Discusses the ethical, legal and social dilemmas in pharmaceutical markets and drug policy for infectious disease

Readings:

* Ecks S. and Harper I (2016) Public-private Mixes. In *When People Come First: Critical Studies in Global Health*. Chapter 9. 252-275.

* Biehl J. and Petryna A (2016) Legal Remedies. In *When People Come First: Critical Studies in Global Health*. Chapter 12. 325-246.

October 25: Student Workshop 5: Class Debate on Experimental Trials (Graded)*

- Introduces the ethical and political challenges of experimental trials
- Class debate (for/against) on the ethical considerations for Zika Virus Vaccine development

Readings:

NIAID (2017) Ethical Considerations for Zika Virus Human Challenge Trials. Report. Available at:

<https://www.niaid.nih.gov/sites/default/files/EthicsZikaHumanChallengeStudiesReport2017.pdf>

Petryna, A. (2005). Ethical variability: drug development and globalizing clinical trials. *American Ethnologist*, 32(2), 183-197.

October 30: Health Systems – the Horizontal-Vertical Divide

- Introduces long-standing debates about “vertical” disease-specific interventions and broader “horizontal” initiatives aimed at health system reform

Readings:

Béhague, D. P., & Storeng, K. T. (2008). Collapsing the vertical-horizontal divide: an ethnographic study of evidence-based policymaking in maternal health. *American Journal of Public Health*, 98(4), 644-649.

Berry, N. S. (2014). Did we do good? NGOs, conflicts of interest and the evaluation of short-term medical missions in Sololá, Guatemala. *Social Science & Medicine*, 120, 344-351.

* Pfeiffer J (2016) The struggle for a public sector. In *When People Come First: Critical Studies in Global Health*. Chapter 6. 166-181.

November 1: Student Workshop 6: The Social Lives of Health Workers (Graded)*

- Introduces anthropological research on health workers
- Discusses issues with volunteerism and the health labor market
- Group project: Design a funding proposal to improve health worker conditions and effectiveness

Readings:

Maes, K. (2015). Community health workers and social change. *Annals of Anthropological Practice*, 39(1), 1-15.

Prince, R. J., & Otieno, P. (2014). In the shadowlands of global health: Observations from health workers in Kenya. *Global public health*, 9(8), 927-945.

November 6: Disease Elimination Narratives

- Explores how disease elimination is framed at a global policy level, and how elimination efforts play out at the local level.

Readings:

* Moran-Thomas, A. (2013) A Salvage Ethnography of the Guinea Worm. In *When People Come First*. Chapter 8. Pp. 207-242.

Taylor, S. (2009). Political epidemiology: Strengthening socio-political analysis for mass immunisation—lessons from the smallpox and polio programmes. *Global public health*, 4(6), 546-560.

November 8: Student Workshop 7: Class Debate on Disease Elimination (Graded)*

- Class debate (for/against) on continued support for the elimination of Polio (Groups 1 and 2) and Malaria (Groups 3 and 4).
- No recommended readings. Do individual background research! Come prepared!

November 13: Biosecurity, Emergency, Emerging Diseases

- Introduces the anthropological literature on biosecurity and emerging diseases
- Group presentation 4: What will be the next big global pandemic?

Readings:

* Singer, M (2016) Emergent, Reemergent and Drug-Resistant Infectious Agents. In *Anthropology of Infectious Disease*. Chapter 5. 156-195.

November 15: Student Workshop 8: Pandemic Preparedness

- Class discussion on the politics of pandemic preparedness, and current proposals to reform and counter infectious disease crises.
- Each class group to discuss a different aspect of the National Academy of Medicine report, in light of the Briggs' chapters. Come prepared!

Readings:

* Briggs, C. (2010) *Stories in the Time of Cholera*. Chapter 12-13. Pp. 269-297.

National Academy of Medicine. 2016. *The Neglected Dimension of Global Security: A Framework to Counter Infectious Disease Crises*. Washington, DC: The National Academies Press.

November 20: Infectious Disease in the Anthropocene

- Introduces the Planetary Health movement
- Explores infectious disease in the context of social, environmental and climate change

Readings:

* Singer M (2016) Inequality, Political Ecology and the Future of Infectious Disease. In *Anthropology of Infectious Disease*. 225-266.

November 23: No Classes (Break)

November 27: Student Writing Workshop (ESSAY OUTLINE IS DUE!)

- Come prepared to class with your 2-page outline
- Students will read each others' work and provide feedback
- No required readings this class

November 29: Disease Modeling Revisited

- Explores past and future avenues for collaboration and interdisciplinary research between social science and epidemiology for disease models.

Readings:

Christley, R. M. et al. (2013). "Wrong, but useful": negotiating uncertainty in infectious disease modelling. *PloS one*, 8(10), e76277.

Scoones, I., Jones, K., Iacono, G. L., Redding, D. W., Wilkinson, A., & Wood, J. L. N. (2017). Integrative modelling for One Health: pattern, process and participation. *Phil. Trans. R. Soc. B*, 372(1725), 20160164.

December 4: Infectious Disease Futures: Scenario Planning Workshop

- Introduces future studies and the concept of scenario planning

Readings:

Anderson, B. (2010). Preemption, precaution, preparedness: Anticipatory action and future geographies. *Progress in Human Geography*, 34(6), 777-798.

Baylis, M., & Githeko, A. K. (2006) Infectious Diseases: preparing for the future. Executive summary. UK Government Report.

December 6: Activist Anthropology? Perils and Promises

- Reflects on the course content, with particular focus on 'activist anthropology' and the West African Ebola epidemic

Readings:

Abramowitz, S. (2017). Epidemics (Especially Ebola). *Annual Review of Anthropology*, 46(1).

Nichter, M. (2006). Anthropology and global health: Reflections of a scholar-activist. *India Review*, 5(3-4), 343-371.

December 10: Research Paper is Due!!!