# **Professor Josh Busby**

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#### **FALL 2020**

Fall 2020 - - PA 388K - Environmental Change, Development, and Security Class Meeting Time: T 2:00PM to 5:00PM Classroom: Online, Zoom

Can environmental problems lead to security problems? Answers to this question require an understanding of what constitutes security. Security for whom? States? Individuals? This course will primarily review two waves of scholarship on environmental security, the first from the 1990s in which scholars assessed the connections between environmental problems and conflict, and the second from the 2000s on the connections between climate change and security. In the process, the course will review different conceptions of security, from narrow conceptions that focus on environmental change and conflict onset to broader understandings of human security. Along the way, other side discussions of environmental security will be explored including (1) wildlife poaching crisis and security, (2) environmental peacemaking and (3) the effects of war on the environment.

**Objectives:** I want to familiarize you with the latest in scholarly and policy debates about climate security and what to do about these problems.

### **Requirements and Expectations**

Course assignments will include a final paper, a grounding exercise related the readings to some news articles, two short writing assignments, a policy memo, and a Security Council simulation assignment.

#### Readings

Readings will be articles and chapters on electronic reserve, roughly 100-150 pages per week.

## **COURSE REQUIREMENTS**

- Writing Assignments (20%)
- Grounding Exercise (15%)
- Security Council Simulation (15%)
- Final Paper (35%)
- Policy Memo (15%)

Writing Assignments (20%): You need to write two 2 double-spaced-page response papers to the readings over the course of the semester for two different weeks. Your responses should be double-spaced. You should address all of the authors you read for that week. What is their argument? Do you agree with their assessment? Why or why not? This assignment will force you to be pithy. The best papers will provide a <u>synthesis</u> of some of the key points made in the readings, your own critical evaluation of and reactions to the readings, and comments on the conceptual implications of the readings. Do NOT sequentially summarize each of the readings. Response papers are due the beginning of the class for the topic on that given day.

**Grounding Exercise (15%):** Take one of the topics you are not writing about for reading summaries and volunteer to do a grounding exercise. Each week, I will select a trouble spot/issue in the world related to the theme for the week, and you and possibly a partner will spend 45 minutes to I hour leading a discussions why it is a trouble spot and what to do about it. In addition, I'd like a one page single-spaced paper relating the news story to the readings for the week. You should load that paper on to Canvas before the session.

**Security Council Simulation (15%):** Each of you will be tasked to represent a country in Security Council deliberations over an issue. You will be asked to research that country's diplomatic approach to climate and security and write up a one-page single-spaced memo outlining the country's concerns and likely diplomatic approach to the issue. We will then have a structured simulation over the course of the session to roll play the Security Council interaction. You will be asked to make an opening statement and then engage in diplomatic side conversations with your peers before we reconvene and have a final conversation/possible vote on the matter. More instructions will be made available.

**Final Paper (35%):** Take an environmental issue that you care about that you think has generated security consequences (disasters, protests, violence). Assess what those are, the nature of the relationship, the strength of the information, and several options to address the problem. You might choose paired cases of two cases both affected by environmental change but only one with negative security consequences. More detailed instructions about the essay will be handed out, but it will count for 45% of your grade and be roughly 15 pages in length (12-pt font, double-spaced) excluding the bibliography and graphics.

**Policy Memo (15%):** You will write a two-page single-spaced memo summarizing the problem of your final paper and identifying three options to do something about it.

\* Late assignments will be penalized by 1/3 of a letter grade for every day late. Thus, an A- would become a B+, a B+ a B, etc.

My grading scale 93 and up is an A 90-93 A-87-90 B+ 83-87 B 80-83 B-

→ Keep in mind LBJ School policies on academic integrity. Duly cite and quote your sources in any written material.

**COVID:** I am sympathetic that in the time of COVID, we face unusual circumstances, and our working conditions and home life may be far from ideal. We are all doing the best we can. I will be mindful of that, and I hope will too. I will endeavor to make the class very engaging.

# **Course Digest**

I	September I	What is the environment? What is security?
2	September 8	Environmental Security – First Generation
3	September 15	First Generation Critiques
4	September 22	Environmental Impact of War/New Dimensions in
		Environmental Security
5	September 29	Climate and Security – The Policy Debate
6	October 6	Climate and Security – The Academic Debate
7	October 13	Critical Infrastructure/Military Missions/Arctic
8	October 20	Food & Agriculture
9	October 27	Water
	November 3	Election Day – No Class (Vote, Civic Duty Day)
10	November 10	Disasters
11	November 17	Migration/Managed Retreat
12	November 24	United Nations Security Council Simulation
13	December I	What To Do Going Forward?
	December 8	Final Paper and Memo Due

# **Course Schedule**

I	September I	What is the environment? What is security?
		Johnson, D. L., S. H. Ambrose, T. J. Bassett, M. L. Bowmen, and et al. "Meanings of Environmental Terms." 1997. Journal of Environmental Quality; Madison 26, no. 3: 581-589.
		Walt, Stephen M. 1991. "The Renaissance of Security Studies," <i>International Studies Quarterly</i> 35, no. 2 (1991): 211–39.
		Ullman, Richard. 1983. "Redefining Security." <i>International Security</i> 8, no. 1: 129–53.
		Barnett, J., Matthew, R.A., O'Brien, K.L., 2010. Global Environmental Change and Human Security: An Introduction, in: Matthew, R.A., Barnett, J., McDonald, B., O'Brien, K.L. (Eds.), Global Environmental Change and Human Security. MIT Press, Cambridge, 3–32.
		Paris, Roland. 2001. "Human Security: Paradigm Shift or Hot Air?" <i>International Security</i> 26, no. 2: 87–102.

2	September 8	Environmental Security – First Generation
		Malthus, Thomas. 1798. "An Essay on the Principle of Population." Chapters 1-2, 1-11.
		Kaplan, Robert, 1994. The Coming Anarchy. Atl. Mon. 273, 44–76.
		Homer-Dixon, Thomas F. 1991. "On the Threshold: Environmental Changes as Causes of Acute Conflict." International Security 16, no. 2 (1991): 76–116.
		Homer-Dixon, Thomas F. 1994. "Environmental Scarcities and Violent Conflict: Evidence from Cases." <i>International Security</i> 19, no. 1: 5–40.
		Conca, Ken and Geoffrey D. Dabelko. 2002 Environmental Peacemaking (Washington, D.C. Baltimore: Woodrow Wilson Center Press; Johns Hopkins University Press)., 1-23, 220-234.
3	September 15	First Generation Critiques
		Deudney, D., 1990. The Case Against Linking Environmental Degradation and National Security.  Millennium 19, 461–476.
		Levy, M.A., 1995. Is the Environment a National Security Issue? <i>Int. Secur.</i> 20, 35–62.
		Homer-Dixon, T.F., Levy, M.A., 1995. Environment and Security. <i>Int. Secur.</i> 20, 189–198.
		Gleditsch, N.P., 1998. Armed Conflict and the Environment: A Critique of the Literature. <i>J. Peace Res.</i> 35, 381–400.
		Kahl, C.H., 2006. States, scarcity, and civil strife in the developing world. Princeton University Press, Princeton. I-64.
4	September 22	Environmental Impact of War/New Dimensions in Environmental Security
		Reuveny, Rafael, Andreea S. Mihalache-O'Keef, and Quan Li. 2010. "The Effect of Warfare on the Environment."

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		Journal of Peace Research 47 (6): 749–61.
		Hanson, Thor, Thomas M. Brooks, Gustavo a. B. Da Fonseca, Michael Hoffmann, John F. Lamoreux, Gary Machlis, Cristina G. Mittermeier, Russell A. Mittermeier, and John D. Pilgrim. 2009. "Warfare in Biodiversity Hotspots." <i>Conservation Biology</i> 23 (3): 578–87.
		Lawrence, M. et al. 2015. The effects of modern war and military activities on biodiversity and the environment. <i>Environ.</i> Rev. 23: 443–460.
		Butsic, Van, Matthias Baumann, Anja Shortland, Sarah Walker, and Tobias Kuemmerle. 2015. "Conservation and Conflict in the Democratic Republic of Congo: The Impacts of Warfare, Mining, and Protected Areas on Deforestation." <i>Biological Conservation</i> 191 (November): 266–73.
		Beyers, Rene L. et al. 2011. Resource Wars and Conflict Ivory: The Impact of Civil Conflict on Elephants in the Democratic Republic of Congo - The Case of the Okapi Reserve. <i>PLos One.</i> 1-12.
		DNI. 2013. Wildlife Poaching Threatens Economic, Security Priorities in Africa. 1-7.
		Stiles, Daniel. 2014. Ivory Trade, Terrorism And U.S. National Security: How Connected Are They?. Unpublished paper. 1-25.
		Haenlein, Cathy and M L R Smith. 2016. "Poaching, Wildlife Trafficking and Security in Africa: Myths and Realities." Whitehall Papers. Introduction and Conclusion. 1-21 & 102-109.
5	September 29	Climate and Security – The Policy Debate
		CNA Corporation, 2007. National Security and the Threat of Climate Change, 5-18.
		Busby, J., 2007. Climate Change and National Security: An Agenda for Action. Council on Foreign Relations. I-27.
		National Research Council, 2008. Climate and Social Stress. I-14.

		National Intelligence Council, 2008. National Intelligence Assessment, Climate and Security. 1-20.  Adelphi and Woodrow Wilson Center. 2015. A New
		Climate for Peace. Executive Summary. Vii-xix. & 1-123.
6	October 6	Climate and Security – The Academic Debate
		Adger, W.N., et al., 2015. Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK and New York, NY, USA, 758-761 & 771-778.
		Gleditsch, N.P., 2012. Whither the weather? Climate change and conflict. <i>J. Peace Res.</i> 49, 3–9.
		Meierding, Emily, 2013. "Climate Change and Conflict: Avoiding Small Talk about the Weather," <i>International Studies Review</i> 15, no. 2 (June 1, 2013): 185–203.
		Hendrix, C., Gates, S., Buhaug, H., 2016. Environment and Conflict, in: Mason, T.D., Mitchell, S.M. (Eds.), What Do We Know about Civil Wars? Rowman & Littlefield Publishers, Lanham, Maryland, 231–246.
		Koubi, Vally. 2019. "Climate Change and Conflict." Annual Review of Political Science, 343-360.
		Busby, Joshua. 2019. Taking Stock: the Field of Climate and Security Current Climate Change Reports, 338-346.
		Mach, Katharine J. et al. 2019. Climate as a risk factor for armed conflict, Nature 571: 193–197.
7	October 13	Critical Infrastructure/Military Missions/Arctic
		Center for Climate and Security. 2018. Sea Level Rise And The U.S. Military's Mission. 1-50.
		U.S. Department of Defense. 2014. Adaptation Roadmap. 1-16.
		U.S. Department of Defense. 2019. Report on Effects of a

		Changing Climate to the Department of Defense. 1-22.
		U.S. Department of Defense. Lists of Top Facilities at Risk.
		Jaffe, Amy Myers et al. 2020. Impact of Climate Risk on the Energy System. Council on Foreign Relations. 1-21, 32-34, 54-64.
		Holland, Andrew. National Security in a Rapidly Changing Arctic. American Security Project. 1-10.
8	October 20	Food and Agriculture
		Office of the Director of National Intelligence, 2015. Global Food Security. 1-20.
		Iglesias, Ana, Sonia Quiroga, and Agustin Diz. 2011. "Looking into the Future of Agriculture in a Changing Climate." European Review of Agricultural Economics 38, no. 3: 427–47.
		von Uexkull, Nina, Mihai Croicu, Hanne Fjelde, and Halvard Buhaug. 2016. Civil conflict sensitivity to growing-season drought. <i>Proceedings of the National Academy of Sciences</i> : 201607542. I-6.
		Lagi, Marco Karla Z. Bertrand and Yaneer Bar-Yam. 2011. "The Food Crises and Political Instability in North Africa and the Middle East." New England Complex Systems Institute. 1-11.
		Smith, T.G., 2013. "Food Price Spikes and Social Unrest in Africa." CCAPS. 1-12.
		Hendrix, Cullen. 2013. "Climate Change, Global Food Markets, And Urban Unrest." CCAPS 1-8.
		Busby, Joshua and Nina von Uexkull. 2018. "Climate Shocks and Humanitarian Crises Which Countries Are Most at Risk?" Foreign Affairs. 1-3.
9	October 27	Water
		Office of the Director of National Intelligence, 2012. Global Water Security. I-20.

		USAID. 2014. Water and Conflict Toolkit. 1-41.
		World Bank. 2016. "High and Dry: Climate Change, Water, and the Economy." I-9, 40-47.
		Busby, J., 2017. "Water and Security." Council on Foreign Relations. 1-19.
		Sternberg, T. 2017. "Water Towers: Security Risks in a Changing Climate Troy Sternberg" 20-27.
		Stefano, L.D., Duncan, J., Dinar, S., Stahl, K., Strzepek, K.M., Wolf, A.T., 2012. Climate change and the institutional resilience of international river basins. <i>J. Peace Res.</i> 49, 193–209.
		Shidore, Sarang. 2020. Climate Change and the India-Pakistan Rivalry. Center for Strategic Risks. 1-20.
		Jensen, David et al. 2014. Water and Post-Conflict Peacebuilding. UNEP. 1-8.
	November 3	Election Day – No Class (Vote, Civic Duty Day)
10	November 10	<u>Disasters</u>
		United Nations. 2015. Sendai Framework for Disaster Risk Reduction 2015 – 2030. 1-26.
		Kelman, Ilan. 2015. "Climate Change and the Sendai Framework for Disaster Risk Reduction." 117-126.
		Sen, Amartya. 2000. Development as Freedom. First Anchor Books, 160-188.
		· · · · · · · · · · · · · · · · · · ·
		Books, 160-188.  Kelman, Ilan. 2006. "Island Security and Disaster Diplomacy in the Context of Climate Change." Les Cahiers
		Books, 160-188.  Kelman, Ilan. 2006. "Island Security and Disaster Diplomacy in the Context of Climate Change." Les Cahiers de La Sécurité 63: 61–94.  Smith, Alistair and Alejandro Quiroz Flores. 2010.

		Natural Disasters Precipitate Peace?" CCAPS. 1-8.
П	November 17	Migration/Managed Retreat
		Reuveny, R., 2007. Climate change-induced migration and violent conflict. Polit. Geogr. 26, 656–673.
		Raleigh, C., Jordan, L., Salehyan, I., 2008. Assessing the Impact of Climate Change on Migration and Conflict. Soc. Dimens. Clim. Change. 1-40.
		Werz, Michael and Laura Conley. 2012. "Climate Change, Migration, and Conflict. Addressing complex crisis scenarios in the 21st Century." Center for American Progress. 1-38.
		Adger, et al. 2015. Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK and New York, NY, USA, 766-771.
		McLeman, Robert. 2017. "Migration and Displacement in a Changing Climate." Center for Climate and Security. 100-106.
		McLeman, Robert and Francois Gemenne. 2018 "Environmental migration research: evolution and current state of the science." Routledge Handbook of Environmental Migration. 3-13.
		Douglass, Collin. 2017 Sea Level Rise, Deterritorialized States and Migration: The Need for a New Framework. Center for Climate and Security. 1-4.
		Barnett, Jonathon. The dilemmas of normalising losses from climate change: Towards hope for Pacific atoll countries. Asia Pacific Viewpoint. 2017. 3-13.
		Femia, Francisco and Caitlin Werrell. 2012. "Syria: Climate Change, Drought and Social Unrest." Center for Climate and Security. 1-5.
		Selby, Jan, Omar S. Dahi, Christiane J. Fröhlich, and Mike Hulme. "Climate Change and the Syrian Civil War

		Revisited." Political Geography 60 (2017): 232–44.
12	November 24	UN Security Council Simulation
		Climate Security Experts Network. 2019. "Short history of UNSC engagement on climate-related security risks." <a href="https://climate-security-expert-network.org/node/12/">https://climate-security-expert-network.org/node/12/</a>
		United Nations Climate Security Mechanism. 2020. Briefing Note. 1-16.
		United Nations Climate Security Mechanism. 2020. Conceptual Approach. 1-7.
		United Nations Climate Security Mechanism. 2020. Checklist. I-4.
		Vivekananda, Janani, Adam Day, and Susanne Wolfmaier. 2020. What Can the UN Security Council Do on Climate and Security. adelphi. 1-20.
		König, Christian and Janani Vivekananda. 2020. How Can UN Organs Respond To Climate-Security Risks? Adelphi. I-5.
		Born, Camila, Carolina Eklow, and Malin Mobjork.  Advancing United Nations Responses to Climate-related Security Risks. SIPRI. 2019. 1-4.
		Vivekananda, Janani. 2020. Key points from the July 24th UNSC Open Debate.
		https://www.youtube.com/watch?v=KWwY2Sqsvco
13	December I	What To Do Going Forward?
		Dabelko, G.D., Risi, L.H., Null, S., Parker, M., Sticklor, R., 2013. Backdraft: The Conflict Potential of Climate Change Adaptation and Mitigation. Wilson Center. 3-12.
		USAID 2015. Climate Change and Conflict. IX-XII, 14-32.
		Moran, Busby, and Raleigh. 2018. The Double Burden of Climate Change and State Fragility. New Security Beat. <a href="https://www.newsecuritybeat.org/2018/10/double-burden-climate-exposure-state-fragility/">https://www.newsecuritybeat.org/2018/10/double-burden-climate-exposure-state-fragility/</a>

December 8	Final Paper and Memo Due
	Werrell, Caitlin and Francisco Femia. 2019. "The Responsibility to Prepare and Protect." Center for Climate and Security. 1-36.
	Smith, Dan et al. 2019. Climate Security: Making it #Doable. Clingendael. 1-25.
	Van Shaik, Louise et al. 2019. Making Peace with Climate Adaptation. Clingendael. 1-23.
	Busby, Joshua. 2020. "Beyond internal conflict: the next decade of climate security." Under review at the Journal of Conflict Resolution. 1-28.

#### **RESOURCES**

#### **Publications**

Daniel Moran, 2012. Climate Change and National Security: A Country-Level Analysis, Georgetown University Press. <a href="http://press.georgetown.edu/book/georgetown/climate-change-and-national-security">http://press.georgetown.edu/book/georgetown/climate-change-and-national-security</a>

David Reed, 2014. In Pursuit of Prosperity: U.S Foreign Policy in an Era of Natural Resource Scarcity. (Routledge).

David Reed, 2017. Water, Security, and U.S. Foreign Policy Routledge

Office of the Director of National Intelligence, 2016. Implications for US National Security of Anticipated Climate Change.

https://www.dni.gov/files/documents/Newsroom/Reports%20and%20Pubs/Implications\_for\_US\_National\_Security\_of\_Anticipated\_Climate\_Change.pdf

#### Other USG Documents

https://climateandsecurity.org/resources/u-s-government/ https://climateandsecurity.org/resources/u-s-government/intelligence/

#### Other Govt & IOs

https://climateandsecurity.org/resources/other-governments-and-regional-institutions/https://climateandsecurity.org/resources/international-institutions/

Routledge has a number of books (most of them available for free through library) <a href="https://www.routledge.com/search?kw=climate+security">https://www.routledge.com/search?kw=climate+security</a>

# **Organizational Resources**

adelphi, https://www.adelphi.de/en/topics/climate/climate-and-security

American University, Inventory of Conflict and the Environment, <a href="https://edspace.american.edu/jlee/ice/">https://edspace.american.edu/jlee/ice/</a>

American Security Project, <a href="http://www.americansecurityproject.org/climate-security/">http://www.americansecurityproject.org/climate-security/</a>

Center for American Progress, <a href="https://www.americanprogress.org/projects/climate-migration-security/view/">https://www.americanprogress.org/projects/climate-migration-security/view/</a>

Center for Climate and Security, <a href="https://climateandsecurity.org/">https://climateandsecurity.org/</a>

Climate Security Expert Network, <a href="https://climate-security-expert-network.org/">https://climate-security-expert-network.org/</a>

CNA Corporation, <a href="https://www.cna.org/mab/reports">https://www.cna.org/mab/reports</a>

Complex Emergencies and Political Stability in Asia (CEPSA), <a href="https://www.strausscenter.org/cepsa/">https://www.strausscenter.org/cepsa/</a>

ECC Factbook. <u>www.newclimateforpeace.org/thematic-reading/factbook</u>

Environmental Peacebuilding, <a href="https://environmentalpeacebuilding.org/">https://environmentalpeacebuilding.org/</a>

International Alert, <a href="http://international-alert.org/climate-change">http://international-alert.org/climate-change</a>

International Crisis Group, <a href="https://www.crisisgroup.org/climate">https://www.crisisgroup.org/climate</a>

International Military Council on Climate and Security, https://imccs.org/council/

LB| School PRP on Oceania, <a href="http://sites.utexas.edu/climatesecurity/">http://sites.utexas.edu/climatesecurity/</a>

New Security Beat, <a href="https://www.newsecuritybeat.org/">https://www.newsecuritybeat.org/</a>

Oregon State, Transboundary Freswater Dispute Database, <a href="http://www.transboundarywaters.orst.edu/">http://www.transboundarywaters.orst.edu/</a>

Pacific Institute, Water Conflict Chronology, http://www2.worldwater.org/conflict/

Planetary Security Initiative, <a href="https://www.planetarysecurityinitiative.org/">https://www.planetarysecurityinitiative.org/</a>

Stockholm International Peace Research Institute, <a href="https://www.sipri.org/research/peace-and-development/climate-change-and-risk/climate-change-and-security">https://www.sipri.org/research/peace-and-development/climate-change-and-risk/climate-change-and-security</a>

Strauss Center, Climate Change and African Political Stability (CCAPS), <a href="https://www.strausscenter.org/ccaps/">https://www.strausscenter.org/ccaps/</a>

Strauss Center, Complex Emergencies and Political Stability in Asia (CEPSA), <a href="https://www.strausscenter.org/cepsa">https://www.strausscenter.org/cepsa</a>

Strauss Center, State Fragility Initiative, <a href="https://www.strausscenter.org/state-fragility/">https://www.strausscenter.org/state-fragility/</a>

Wilson Center Environmental Change and Security Program, <a href="https://www.wilsoncenter.org/program/environmental-change-and-security-program">https://www.wilsoncenter.org/program/environmental-change-and-security-program</a>

#### Multi-Media

Climate for Conflict

http://thegroundtruthproject.org/somalia-climate-change-conflict-podcast/

Years of Living Dangerously <a href="http://yearsoflivingdangerously.com/">http://yearsoflivingdangerously.com/</a>

Backdraft Podcast Series. https://www.podomatic.com/podcasts/ecsp-wwc

Center for Climate and Security Podcast.

https://climateandsecurity.org/podcast/

#### MOOC

UNEP. Environmental Security and Sustaining Peace. <a href="https://www.edx.org/course/environmental-security-and-sustaining-peace">https://www.edx.org/course/environmental-security-and-sustaining-peace</a>

#### **Data**

UNEP World Environment Situation Room (climate hazard maps) <a href="https://app.mapx.org/?project=MX-XVK-HPH-OGN-HVE-GGN&lockProject=true">https://app.mapx.org/?project=MX-XVK-HPH-OGN-HVE-GGN&lockProject=true</a>

EM-DAT International Disaster Database <a href="http://www.emdat.be/">http://www.emdat.be/</a>

Munich-Re (German re-insurer with disaster data) <a href="http://natcatservice.munichre.com/">http://natcatservice.munichre.com/</a>