Version 1/20/2017: Syllabus subject to change at Professor's discretion



"Dust hangs in the sunset sky above the Suncor Millennium Mine, an open pit mine north of Fort McMurray, Canada," Peter Essick for National Geographic. Available at: <u>http://ngm.nationalgeographic.com/2009/03/canadian-oil-sands/kunzig-text</u>

IR/GE 308: Introduction to Global Resource Geopolitics: Natural Resources, Development, and Conflict

Lecture and Discussion: CAS 227, MWF 2:30 – 3:20 Professor: Julie Michelle Klinger, PhD Email: <u>jklinger@bu.edu</u> (checked on weekday mornings) Office Hours: 152 BSR #G04D M 3:30 – 5 pm, F 12:30 – 2 pm. Office Hours Appointments must be scheduled online at: <u>https://professorklinger.youcanbook.me</u>

Course Description and Objectives: Conflict over natural resources is often described as the defining feature of our age. As global demand for energy, consumer goods, and high technology increases, so our geopolitical contests seem to intensify. Technological development continues to change the definition of resources, the nature of conflicts, and the manner in which resources are valued, extracted, exchanged, and controlled across the globe. Meanwhile, diverse actors and institutions are experimenting with measures to govern the immense, essential, and deeply problematic enterprises responsible for wresting raw materials from the earth and transforming them into the hardware of everyday life. In a time of multiple environmental and political crises, it is especially important to understand how global resource geopolitics shape our lives in ways big and small.

This introductory course equips students with the tools they need to understand the relationship between conflict, natural resources, and the effects of this relationship on development, peace, and security. The course is divided into three parts. Part I familiarizes students with key concepts in global resource geopolitics and examines the historical transformations that led to our present moment of global conflict, climate crisis, and widespread predictions of resource exhaustion. Part II examines the key concepts behind fears of resource scarcity, namely the environment, natural resources, and thresholds. Part III examines key cases and governance approaches to global resource geopolitics, looking in particular at conflict minerals, oil and gas, and rare earth elements. Throughout the course, we examine cases from the Americas, Eurasia, and Africa. Students will complete a semester-long research project that analyzes the geopolitics of an place and resource of their choice.

Required Materials

All reading materials are available on Blackboard or through the BU ebrary online library.

Course Requirements, Assignments, and Grading: This is a challenging course, but the requirements for success are simple: Closely read the assigned readings. Attend lecture and participate in discussion. Complete all assignments on time. Take pride in your work. Be respectful. Listen to each other. Take notes. If at any point you are concerned about your grade or any other aspect of the course, bring it up with your professor.

The course has three components: participation in lecture and discussion, a semester-long research project (described below), and a midterm exam. Your grade consists of the following:

| Participation in lecture and discussion: | 20% |
|--|-----|
| Midterm exam: | 35% |
| Research project: | 45% |

Participation (20%): Your attendance and preparation are important to achieving the greatest possible learning outcomes for you and your peers. Participation is evaluated based on your attendance, engagement, preparation, and completion of all in-class assignments and activities.

Attendance: Students are responsible for keeping up with the material covered in all classes. Planned absences must be reported in advance.

<u>Excused:</u> Religious holiday observance, major life events (births and deaths), and health matters (physical or mental), matters of professional or academic importance (conference participation, job interview, etc.), apocalypse.

<u>Unexcused:</u> Any planned absence not reported within 24 hours of the missed class. Two unexcused absences will lower your grade by one full letter.

Engagement: Attendance is more than being physically present. You must be mentally present, too. If you are prone to distraction, sit in the front of the class. Your phones must be off and out of sight for the duration of lecture and section. You must also engage with each other. Learn each other's names, and take notes when your classmates are speaking.

Preparation: It is not only acceptable but expected that some readings will challenges you as you proceed through the course. That is, after all, the point. Bring your questions and quandaries to class, present them in a respectful way, and we will work through them together.

Weekly Sidebar: A Sidebar is a parallel discussion that occurs during an important event or meeting, generally with the purpose of sharing especially relevant information that is vital to understanding the larger issue or questions at hand. These will be done in the first 10 minutes of the first lecture session each week, in the style of a morning briefing of a UN mission. You will be responsible for one during the course of the semester. Sign-ups will be held during the second week of the semester. A topic is provided for you at the top of each week. Beyond that, you are expected to exercise leadership in thought and analysis as you prepare your sidebar presentation.

Open Book Quizzes: Open quizzes are intensive review and reinforcement sessions held during the first half of the semester. You will be given essay questions and allowed access to your course materials in order to craft your responses. The purpose is to reinforce your knowledge of key concepts covered in assigned readings and lectures and to prepare you to succeed on your midterm exam.

Semester Research Project (45%): Students will complete a semester-long research project that analyzes the resource geopolitics of an approved place and resource of their choice. The project consists of the following:

Regional Geopolitical Profile (40% of project grade): This 1500-word research essay provides an overview of the geopolitical, development, sociopolitical, and extractive history of the region or country of your choice. Your selected site must be the same as that for which you complete your commodity chain analysis. The assignment will be given in class on 1/27. The essay will be due at the beginning of class on 2/21.

Commodity Chain Analysis (40% of project grade): This 2000-word research essay traces the production chain of the commodity extracted from the site profiled in the first essay. To the fullest extent possible, you will describe the journey of the commodity from its point of origin to its final point of consumption

and disposal. The assignment will be given in class on 3/13 and will be due at the beginning of class on 4/24.

Final Presentation (20% of project grade): The final week of classes will be devoted to your final presentation. The final presentation must: briefly synthesize your findings from the two essays, discuss the relationship between commodity extraction and regional geopolitics, contain a visual component, and allow time for a brief Q&A.

Complete assignment details and grading criteria will be distributed in Lecture.

Exams: The purpose of the midterm exam is to *assess* and *reinforce* your grasp of the key concepts covered in the course.

Midterm Exam (35% of course grade): The midterm exam will cover all readings and lectures assigned during Parts I and II.

Course Communications

Most course information is conveyed through Blackboard. Announcements will be made during lecture and discussion as needed. You are responsible for all information conveyed through Blackboard and in-class announcements. If you have questions, consult your classmates or professor.

The syllabus may change subject to Professor's discretion. In the event of syllabus changes, you will be notified through Blackboard. You can always find the current syllabus posted on Blackboard.

Late Work/Extensions

No late assignments are accepted, unless you have arranged an accommodation (see below) in advance with your professor.

Accommodations

<u>Documented Need:</u> If you have a documented need for any academic accommodations, inform your professor in writing within the first full week of the course, or within three days of receiving documentation.

<u>Ad hoc:</u> Should you experience significant personal hardship that endangers your academic performance, your professor will work with you to complete your course requirements within the timeframe of the semester, so long as you *promptly* communicate your situation. No extenuating circumstances will be considered after the final class meeting.

Code of Conduct

It is expected that you will maintain the highest standards of honesty and integrity in all of your work related to this course. What this means for you as a student at Boston University is detailed in the Academic Conduct Code¹ and Disciplinary Procedures². Of particular relevance to this course are violations A and B from the Academic Conduct Code:

"Cheating on examination. Any attempt by a student to alter his of her performance on an examination in violation of that examination's stated or commonly understood ground rules.

"Plagiarism. Representing the work of another as one's own. Plagiarism includes but is not limited to the following: copying the answers of another student on an examination, copying or restating the work or ideas of another person or persons in any oral or written work (printed or electronic) without citing the appropriate source, and collaborating with someone else in an academic endeavor without acknowledging his or her contribution. Plagiarism can consist of acts of commission-appropriating the words or ideas of another-or omission failing to acknowledge/document/credit the source or creator of words or ideas (see [Academic Conduct Code] for a detailed definition of plagiarism). It also includes colluding with someone else in an academic endeavor without acknowledging his or her contribution, using audio or video footage that comes from another source (including work done by another student) without permission and acknowledgement of that source."

It is your responsibility to know the Academic Conduct Code and Disciplinary Procedures in their entirety. Please feel free to raise any questions or concerns in class, section, or during office hours. You may also find the *FAQs about Academic Misconduct and Plagiarism*³ helpful.

All cases of suspected Academic Misconduct will be referred to the Dean's Office.

¹ Academic Conduct Code: <u>http://www.bu.edu/academics/policies/academic-conduct-code/</u>

² Disciplinary Procedures: <u>http://www.bu.edu/academics/policies/academic-conduct-code/</u>

³ FAQs about Academic Misconduct and Plagiarism: <u>http://www.bu.edu/cgsnow/academics/plagiarism-academic-misconduct/</u>

Reading and Lecture Schedule

Week 1 – Course Introductions

F 1/20: Introductory discussion Lecture Theme: Introduction to Resource Geopolitics NO READINGS

Part I: Geopolitics: The Basics

Week 2

Lecture and Discussion Themes: Classical Geopolitics; Critical Geopolitics; Environmental Geopolitics

M 1/23 – Classical Geopolitics

Mackinder, Halford J. (1904) The Geographical Pivot of History. *Geographical Journal*. Pp. 421 – 437.

W 1/25 – Critical Geopolitics

Hyndman, Jennifer. (2001) Towards a feminist geopolitics. *The Canadian Geographer*. Pp. 210 - 222

F 1/27 - Environmental Geopolitics Essay 1 assignment given in class

Dalby, Simon (2012). Environmental Geopolitics in the 21st Century. *Paper for Presentation to the Sussex Conference "Rethinking Climate Change, Conflict, and Security."* October 18 – 19, 2012.

Week 3

M 1/30 – Discourse, Practice, and Representation

Stuart Hall, "The West and the Rest: Discourse and Power," pp. 276 - 318 (ignore activities, just read the text).

W 2/1 – The Three Ages of Geopolitics

Agnew, John (2003) The Three Ages of Geopolitics. Chapter 6 in *Geopolitics: Re-Visioning World Politics*. Second Edition. Pp. 85 – 114.

F 2/3 – Guest Speaker – Dr. Prabhat Barnwal

NO READINGS

Part II: The Environment, Natural Resources, and Thresholds

Week 4 – Environment and Production

Lecture and Discussion Themes: Geopolitical and Geoeconomic organization: Society vs. Nature, Core and Periphery, Town and Hinterland, The Greater Good and Sacrifice Zones

M 2/6 – Open Quiz

NO READINGS

W 2/8 – Reorganizing Nature

Reidy, Michael S. (2011) From the Oceans to the Mountains: Spatial Science in an Age of Empire. Chapter 1 in *Knowing Global Environments: New Historical Perspectives on the Field Sciences.* Pp. 17 – 38.

$F\!-\!2\!/10$ - 'The Greater Good' and Sacrifice Zones

Valdivia, Gabriela. (2015) The Sacrificial Zones of "Progressive" Extraction in Andean Latin America. *Latin American Research Review* 50(3) Pp. 245-253.

Pruett, Dave. (2016). We're all in the Sacrifice Zone Now. *The Huffington Post Blog*. Available at: <u>http://www.huffingtonpost.com/dave-pruett/were-all-in-the-sacrifice-zone-now_b_9823482.html</u>

Week 5 – Natural Resources and Thresholds

Lecture and Discussion Themes: Geopolitical Assumptions: Scarcity vs. Surplus; The Population Debate; Conservation vs. Production

M 2/13 – Geopolitical Assumptions: Scarcity vs. Surplus

Kaplan, Robert D. (1994) The Coming Anarchy: How Scarcity, Crime, Overpopulation, Tribalism, and Disease are Rapidly Destroying the Fabric of Our Planet. *The Atlantic Monthly*.

W 2/15 – Tragedy of the Commons?

Hardin, Gareth (1968). The Tragedy of the Commons. *Science*. 162(3859): 1243 - 1248

Gardiner, Stephen Mark (2001). The Real Tragedy of the Commons. *Philosophy* and *Public Affairs*. Pp. 387 – 416.

F 2/17 – Population and Over-population

Hartmann, Betsy (1995) The Malthusian Orthodoxy. Chapter 2 in *Reproductive Rights and Wrongs: The Global Politics of Population Control and Contraceptive Choice*. Pp. 13 – 40.

Week 6 – Natural Resources and Development

Lecture and Discussion Themes: Free Market vs. Planned Economies; The Resource Curse?; Declining Terms of Trade; Sustainable Development Goals

T 2/21 – SUBSTITUTE MONDAY SCHEDULE

Essay 1 Due at the beginning of class Open Quiz

NO READINGS

W 2/22 – Resource Curse

Sachs, Jeffrey and Andrew M. Warner. (2001) Natural Resources and Economic Development: The Curse of Natural Resources. *European Economic Review* 45. Pp. 827 – 838.

F 2/24 – Resource Curse?

Rodney, Walter (1982) How Europe Underdeveloped Africa, Washington, D.C.: Howard University Press. Pp. 3-29

Week 7 – Anatomy of a Resource War

Lecture and Discussion Themes: What Constitutes a Resource War?

M 2/27 – Resource Conflicts

Le Billion, Philippe. (2004) The Geopolitical Economy of 'Resource Wars' Geopolitics. Pp. 1 - 28

W 3/1 – Conflict Resolution

United Nations Sustainable Development Solutions Network. 2015. Mapping Mining to the Sustainable Development Goals: A Preliminary Atlas. *Executive Summary*. Available at: <u>http://unsdsn.org/wp-content/uploads/2015/09/DRAFT-Final-ES_Mining-and-SDGs_v2.pdf</u>

F 3/3 – Midterm Exam

March 4, 2016 – March 12 – SPRING RECESS

Part III: Key Issues and Case Studies

Week 8 – Conflict Minerals I: Coltan

Lecture and Discussion Themes: Congo and Colombia, The History and Economics of Conflict Minerals from Boston to Beijing

M 3/13 – Part II Introductory Lecture Essay 2 Assignment given in class

NO READINGS

W 3/15 – Selections from Consuming the Congo

Eichstadt, Peter (2013). Prologue: The Gates of Hell in *Consuming the Congo: War and Conflict Minerals in the World's Deadliest Place*. Chicago Review Press.

F 3/17 – Selections from Consuming the Congo

Eichstadt, Peter (2013). Into Coltan Country and Realities of Refugees. Chapters 11 & 12 in Consuming the Congo: War and Conflict Minerals in the World's Deadliest Place. Chicago Review Press.

Week 9 – Conflict Minerals II: Governance

Lecture and Discussion Themes: EITI, Dodd-Frank Legislation, Conflict – Free Smelter Program

M 3/20 – Governance Challenges

Talla, M., (2010). "Revisiting Mining Controls in the DRC: Impossible Transparency in a Weak State." Labour Capital and Society, 2010, Vol.43(1), pp. 99-136

W 3/22 – Policy Efforts

Whitney, T. (2015). Conflict Minerals, Black Markets, and Transparency: The Legislative Background of Dodd-Frank Section 1502 and Its Historical Lessons. *Journal of Human Rights*, *14*(2), 183-200.

Raghaven, S. (2014, November 30). "How a well-intentioned U.S. law left Congolese miners jobless." *The Washington Post*. Available at: <u>https://www.washingtonpost.com/world/africa/how-a-well-intentioned-us-law-left-congolese-miners-jobless/2014/11/30/14b5924e-69d3-11e4-9fb4-a622dae742a2_story.html</u>

F 3/24 – In-class Debate

Week 10 – Energy I: Oil and Gas

Lecture and Discussion Themes: Carbon Dependency Past and Present

M 3/27 – History of Oil

Shah, Sonia (2004) Crude: The Story of Oil. New York: Seven Stories Press. Pp. 1-16

Flink, James J. (1988) The Automobile Age. London and Cambridge: MIT Press. Pp. 358 - 376

W 3/29 – Tar Sands

Adkin, Laurie E. (2015) Ecology and Governance in a First World Petro-State. Chapter 1 in *First World Petro-Politics: The Political Ecology and Governance* of Alberta. Pp. 3 – 50.

F 3/31 - Fracking

Willow, Anna J. and Sara Wylie (2014). Politics, ecology, and the new anthropology of energy: exploring the emerging frontiers of hydraulic fracking. *Journal of Political Ecology* 21(12): 222 – 236.

Week 11 – Energy II: Oil and Gas Governance

M 4/3 – Culture and Disaster

McGuire, Thomas and Diane Austin (2016) Beyond the Horizon: Oil and Gas Along the Gulf of Mexico. Chapter 16 in Strauss, Sarah, Stephanie Rupp, and Thomas Love (eds) *Cultures of Energy: Power, Practices, Technologies.* Pp. 298 – 311.

Available as an ebook:

http://site.ebrary.com.ezproxy.bu.edu/lib/bostonuniv/reader.action?docID=106430 46&ppg=200 BU Library ID Login Required

W 4/5 – Pipeline Geopolitics: In-class presentations

Students will deliver in-class presentations on a selected oil pipeline.

F 4/7 – Pipeline Geopolitics: In-class presentations continued

Week 12 – Critical Materials I: Rare Earth Elements

Lecture and Discussion Themes: Keys to a Clean Energy Future: History, Applications, and Production of Rare Earth Elements

M 4/10 – Selections from Rare Earth Frontiers

Klinger, Julie Michelle (*Forthcoming* 2017) What are rare earths? Chapter 1 in *Rare Earth Frontiers*. Cornell University Press.

W 4/12 – Selections from Rare Earth Frontiers

Klinger, Julie Michelle (*Forthcoming* 2017) "Welcome to the Hometown of Rare Earths," 1980 – 2010. Chapter 3 in *Rare Earth Frontiers*. Cornell University Press.

F 4/14 – Renewable Energy Supply Chains

Stegen, Karen Smith (2015). Heavy Rare Earths, Permanent Magnets, and Renewable Energies: An imminent crisis. *Energy Policy* 79: 1 - 8.

Week 13 - Critical Materials II: Governance

Lecture and Discussion Themes: Environmental Conflicts of Interest: Governance Challenges

M 4/17 – PATRIOT'S DAY – NO CLASS

W 4/19 - Environmental conflicts in Malaysia

Phua, Kai-Lit, and Simon Barraclough (2016) Countering opposition, generating doubt and mobilizing support in rare earth metals-related environmental conflict in Malaysia. *Journal of Political Ecology* 23 pp. 296 – 307

F 4/21 – Legislation

H.R. 1022 Securing Energy Critical Elements and American Jobs Act of 2013. Available at: <u>https://www.congress.gov/bill/113th-congress/house-bill/1022</u>

Week 14 – Final Presentations

M 4/24 – Final Presentations Essay 2 Due at beginning of class

NO READINGS

W 4/26 - Final Presentations

NO READINGS

F 4/28 – Final Presentations

NO READINGS

<u>Week 15 – Course Conclusions</u> Lecture and Discussion Themes: What have we learned? Where do we go from here?

M 5/1 – Final Presentations

NO READINGS

W 5/3 – Closing Lecture and Discussion