University of Georgia INTL 8279

Energy Security and Policy

Time: Tuesday, 12:45 PM – 3:30 PM Place: Sanford Hall, Room 313

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Office Hours: Tuesday and Thursday, 10:30 PM – 11:30 PM or by appointment Driftmier Engineering Center Room 2111 (2nd Floor) or Center for International Trade and Security (adjacent to conference room)

COURSE DESCRIPTION

This course is a comprehensive study of the implications of energy resources on U.S. national security, political and economic stability, and global geopolitics. A particular emphasis will be the power generation sector and nuclear energy in the power sector. This course will extend the scope of energy beyond that of an economic commodity and explore the implications of energy as a tool for geopolitical leverage. There will be an emphasis on various data resources and compiling those data to inform weekly submissions, the midterm deliverable and the final deliverable.

The final deliverable for this course will be a group report and presentation on the disposition of U.S. energy "*in the world as it is*". Groups will be identified in the initial class session. The final deliverable will be data-supported and developed as a full briefing to a select energy security subcommittee for the U.S. House Energy and Commerce Committee. The deliverable will be comprised of the written report itself, an executive summary and a PowerPoint that will be presented during the final two class periods. This should be approached as a semester-long research project that will culminate in the presentation and defense of this final deliverable. As such, all weekly readings and assignments should be contextualized with this in mind.

The class will be divided into six groups of three and one group of four. Each group should consider itself to be part of the technical staff for a committee charged with evaluating the disposition of US energy "*in the world as it is*", the implications of energy resources on U.S. national security, political and economic stability, and global geopolitics, with a particular focus on the US electric power sector.

REQUIRED TEXT

Yergin, Daniel. *The New Map: Energy, Climate, and the Clash of Nations*, The Penguin Press, New York, 2020.

SUPPLEMENTAL RESOURCES

Additional readings and data resources related to contemporary treatments of energy and energy security issues will be assigned throughout the semester.

IMPORTANT DATES

January 13-20 January 18 February 17	Drop/Add for undergraduate-level courses Holiday (M.L.K Day) Instructional Break (No class)
March 9	Midterm
March 12	Instructional Break (No class)
March 23	Withdrawal Deadline
April 8	Instructional Break (No class)
May 3	Last Day of Classes
May 4	Reading Day
May 5-11	Final Exams
May 17	Grades Due

GRADING

Course Requirements and Grading Components

Professionalism	10%	Daily
Weekly Briefings and Participation	30%	Weekly
Midterm Presentations and Report	25%	March 9
Final Group Presentations and Report	35%	April 30

Professionalism (10%)

A student's professionalism grade is determined by one's class participation, attitude toward and enthusiasm for the topic and assignments, contribution to lectures and discussion, engagement in group activities, personal conduct and correspondence with the instructor and all class members. Finally, attendance and punctuality are the hallmarks of professionalism. Unexcused absences will result in a one letter decrease in the student's final grade. Tardiness is defined as being 15-minutes, or more, late for class. Each unexcused tardy will result in a half-letter grade deduction from the final grade.

Weekly Briefings (30%)

Weekly briefings should identify critical issues from the reading(s) that are relevant to energy security as well as issues that were particularly problematic or difficult to understand. The briefings are a group assignment, consisting of a five-minute PowerPoint briefing and a 2-page written brief drawn from that week's reading assignment. Lead authorship of the written brief will be on a rotational basis among group members with other students countersigning, indicating their respective concurrence. This is not to be a summary of the entire reading nor should it be an editorialized opinion or commentary. Rather, each group should identify key energy issues and succinctly, yet pointedly, convey the relevant aspects of those issues to energy security with the intent being to inform the audience and contribute to the final deliverable. Meaning, weekly briefings must convey core messages and demonstrate relevance. It is important to note that the readings will point to numerous other cited works, some of which should be explored and incorporated into the briefing. The briefing should be in PowerPoint format (unless size prohibits, in which cased pdf format will suffice) and the written brief should be in Word format. A template for the written brief will be provided. PowerPoints should be professional in appearance and, as much as possible, represent original compilations; meaning, not a collection of copy/paste information. All briefings must be emailed to Gattie by 12:00 PM on the Monday prior to class. Each group will present its five-minute briefing during the first half of each class.

Reading assignments are listed in the syllabus for the day they will be discussed in class. Each student is expected to complete the required reading and be prepared to actively participate in discussions.

Midterm Presentation and Report (25%)

A midterm presentation will be required for each group. Each presentation must be accompanied by a PowerPoint and an executive summary limited to 3 pages. The planned date for midterm group presentations is Tuesday, March 9th and should be submitted by email by 12:00 PM on Monday, March 8th. Each group is will be given 15 minutes.

Final Presentation and Report (35%)

As noted in the course description, the final presentation and report will be developed as a full briefing to a select energy security subcommittee of the U.S. House Energy and Commerce Committee on the disposition of U.S. energy "*in the world as it is*". The final presentation will be during the final two class periods—April 20th and April 27th, The final report is limited to 5 pages and is due by email Monday, April 19th, 5:00 PM, along with the PowerPoint. Each presentation is limited to 30 minutes.

All electronic file submissions should be named using the following format:

Lastname Firstname INTL 8279 Topic

Example:

Gattie David INTL 8279 Nuclear Policy

CLASS STRUCTURE

Each class meeting should be viewed as a discussion of critical issues that will be leveraged to inform each group's final briefing to the U.S. House Energy and Commerce Committee. As such, it is imperative for each student and group to be prepared for each class by having completed the readings and being fully apprised of having submitted the weekly brief with critical questions, observations and core message. The class will be broken into six groups of three students each and one group of four students. For each class meeting, one student from each group will serve as recorder, memorializing key points from the discussion as a transmittal, by email, to their respective group and to the instructor by the following Friday.

The first half of each class session will be constituted by an initial briefing from each group and a class discussion of critical observations and questions. This will be an open discussion subject to critical comments and constructive input by everyone, with the intention being to inform and contribute to the final deliverable.

Classes will at times be accompanied by a lecture/presentation given by the instructor.

The Final Exam period for INTL 8279 is scheduled for Tuesday, May 11 12:00 PM – 3:00 PM

CLASS SCHEDULE

Week 1 January 19

Course Overview Reading Assignment #1: The New Map, Chapters 1-8 (America's Map)

Week 2 January 26

Discuss Reading Assignment #1 Reading Assignment #2: The New Map, Chapters 9-16 (Russia's Map)

Week 3 February 2

Discuss Reading Assignment #2 Reading Assignment #3: The New Map, Chapters 17-25 (China's Map)

Week 4 February 9

Discuss Reading Assignment #3 Reading Assignment #4: The New Map, Chapters 26-36 (Maps of the Middle East)

Week 5 February 16

Discuss Reading Assignment #4 Reading Assignment #5: The New Map, Chapters 37-40 (Roadmap)

Week 6 February 23

Discuss Reading Assignment #5 Reading Assignment #6: The New Map, Chapters 41-Conclusion (Climate Map)

Week 7 March 2

Discuss Reading Assignment #6 Mid-term preparation

Week 8 March 9

Mid-term presentations Reading Assignment #7 (TBD)

Week 9 March 16

Presentation and Class Discussion: Basics of Atomic Energy Reading Assignment #8 (TBD): Nuclear Power Generation

Some Nuclear Information and Data Links: <u>https://www.iaea.org/</u> <u>https://pris.iaea.org/pris/</u> <u>http://www.world-nuclear.org/</u> <u>http://www.world-nuclear.org/information-library.aspx</u>

Week 10 March 23

Presentation and Class Discussion: Nuclear Power Generation Reading Assignment #9 (TBD): The Nuclear Fuel Cycle

Week 11 March 30

Presentation and Class Discussion: The Nuclear Fuel Cycle Reading Assignment #10 (TBD): Advanced Reactors

Week 12 April 6

Presentation and Class Discussion: Advanced Reactors Reading Assignment #11 (TBD): U.S. Nuclear Power and National Security

Week 13 April 13

Class Discussion Reading Assignment #12 (TBD): U.S. Nuclear Power and National Security

Week 14 April 20

Final Presentations

Week 15 April 27

Final Presentations

Administrative Issues

<u>The course syllabus is a general plan for the course</u>; deviations announced to the class by the instructors may be necessary. All academic work must meet the standards contained in the University of Georgia's "Culture of Honesty" (http://www.uga.edu/honesty/ahpd/culture_honesty.htm). You are responsible to inform yourself about those standards before performing any academic work. Our policy for academic dishonesty is very simple: Don't plagiarize. If you turn in a written assignment that is (in part) not your own work you will receive a failing grade for the course. Disciplinary proceedings to dismiss you from the University may be initiated against you.

The University of Georgia seeks to provide students with disabilities the opportunity to fully participate in educational programs and services. In keeping with this philosophy, it is University policy that students with documented disabilities receive reasonable accommodations through access to classroom information. If you require **special accommodations** because of a university-documented condition, please contact me during the first two weeks of the semester and we can work with the Disability Resource Center in order to achieve a positive outcome.

Coronavirus Information for Students

Face Coverings:

As a reminder, the University of Georgia—along with all University System of Georgia (USG) institutions—requires all faculty, staff, students, and visitors to wear an appropriate face covering while inside campus facilities/buildings where six feet social distancing may not always be possible. Anyone not using a face covering when required will be asked to wear one or must leave the area. Reasonable accommodations may be made for those who are unable to wear a face covering for documented health reasons. Students seeking an accommodation related to face coverings should contact Disability Services at https://drc.uga.edu/.

DawgCheck:

Please perform a quick symptom check each weekday on DawgCheck—on the UGA app or website—whether you feel sick or not. It will help health providers monitor the health situation on campus: <u>https://dawgcheck.uga.edu/</u>

What do I do if I have symptoms?

Students showing symptoms should self-isolate and schedule an appointment with the University Health Center by calling 706-542-1162 (Monday-Friday, 8 a.m.-5 p.m.). Please DO NOT walk-in. For emergencies and after-hours care, see https://www.uhs.uga.edu/info/emergencies.

What do I do if I test positive?

Any student with a positive COVID-19 test is **required** to report the test in DawgCheck and should self-isolate immediately. Students should not attend classes in-person until the isolation period is completed. Once you report the positive test through DawgCheck, UGA Student Care and Outreach will follow up with you.

What do I do if I am notified that I have been exposed?

Revised Guidelines for COVID-19 Quarantine Period

Effective Jan. 4, 2021, students who learn they have been directly exposed to COVID-19 but are not showing symptoms should self-quarantine for **10 days** (consistent with updated Department of Public Health (DPH) and Centers for Disease Control and Prevention (CDC) guidelines). Those quarantining for 10 days must have been symptom-free throughout the monitoring period. Please correspond with your instructor via email, with a cc: to Student Care & Outreach at <u>sco@uga.edu</u>, to coordinate continuing your coursework while self-quarantined.

We strongly encourage students to voluntarily take a COVID-19 test within 48 hours of the end of the 10-day quarantine period (test to be administered between days 8 and 10). Students may obtain these tests at Legion Field (<u>https://clia.vetview.vet.uga.edu/</u>) or at the University Health Center by calling 706-542-1162 (Monday-Friday, 8 a.m.-5 p.m.). Please DO NOT walk-in the University Health Center without an appointment. For emergencies and after-hours care, see <u>https://www.uhs.uga.edu/info/emergencies</u>

If the test is negative, the individual may return to campus, but MUST continue to closely monitor for any new COVID-19 symptoms through 14 days. <u>DawgCheck</u> is the best method for monitoring these symptoms. If new symptoms occur, the individual must not come to campus and must seek further testing/evaluation.

If the test is positive at the end of the 10-day period, the individual must begin a 10day isolation period from the date of the test.

How do I participate in surveillance testing if I have NO symptoms?

We strongly encourage you to take advantage of the expanded surveillance testing that is being offered from **January 4 – 22: up to 1,500 free tests per day at Legion Field and pop-up locations.** Testing at Legion Field can be scheduled at https://clia.vetview.vet.uga.edu/. Walk-up appointments can usually be accommodated at Legion Field, and pop-up saliva testing does not require pre-registration. For planning purposes, precise sites and schedules for the pop-up clinics are published on the UHC's website and its social media as they are secured: https://www.uhs.uga.edu/healthtopics/covid-surveillance-testing.