

Living at the Nuclear Brink: Yesterday & Today

International Policy Studies - IPS 249 – SYLLABUS

Instructor: William J. Perry

Course Overview: The development, testing, and proliferation of nuclear weapons will be covered, from World War II through the Cold War to the present. Emphasis will be placed on understanding the evolving role of these weapons, both militarily and politically. It will also examine controversies and opposition movements to nuclear weapons and their use. The course will feature numerous guest speakers from Stanford and beyond. Students will be required to write in-depth analyses of specific nuclear weapons policy questions. Following this course, students are expected to have a deeper understanding of the profound dangers these weapons continue to present to the world today, and to be motivated to work to mitigate these dangers in the future.

Lectures

Lecture 1 — Introduction; The William J. Perry Project

William J. Perry

This lecture will cover course goals and description of topics; description of the William J Perry Project, including the book, the summer program, educational project, and future plans

Lecture 2 — Nuclear Weapons and World War II

William J. Perry

This lecture will cover the origins and scope of World War II. Particular emphasis will be placed on the last six months of the war in the Pacific including the fire bombings and the Battle of Okinawa; the decision to drop the bomb on Hiroshima and Nagasaki; Potsdam; the effect of the Red Army joining the war against Japan; and the Peace Treaty. Dr. Perry will include personal experiences from his time in the Army of Occupation.

Lecture 3 – Nuclear Weapons and the United States

Joseph C. Martz

This lecture will cover the basic principles of nuclear fission and fusion and their applications to nuclear weapons; the Manhattan Project to develop the bomb; the history of weapons testing in the U.S.; and the evolution of the American nuclear weapons program through the present day.

Lecture 4 – Nuclear Weapons and the Rest of the World

Siegfried Hecker

This lecture will focus on the development and testing of nuclear weapons beyond the United States, including the Soviet Union and China, as well as the development of ICBMs and the onset of the nuclear arms race. It will focus on both the promises and perils of this technology.

Lecture 5 – Nuclear Weapons and the Cold War

William J. Perry, David Holloway

The lecture will present the origins and scope of the Cold War. It will cover six dangerous Cold War Crises, the calculus of mutually assured destruction (MAD); the logic of deterrence, and the origins of the arms race.

Lecture 6 – The Role of Intelligence in the Cold War

William J. Perry, Philip Taubman

This lecture will cover the role of intelligence in the Cold War and the arms race including the missile gap. The rise of satellite reconnaissance: the U2, Corona, and telemetry intercept and its role in the Cold War. Dr. Perry's lecture will be informed by his personal experiences in the development of many of these technologies and involvement in government panels.

Lecture 7 – Nuclear holocaust: How close were we?

William J. Perry, Scott Sagan

This lecture looks at the dangers of nuclear incidents and nuclear war that have arisen from miscalculation, false alarms, and accidents. Thousands of nuclear weapons are deployed on high alert by multiple countries; while the technology of the weapons, their delivery systems and their command and control network is impressive, it is not perfect, and the “human factor” is always present.

Lecture 8 - Presentation of Issues for Policy Paper

William J. Perry, Roshan Shankar

Hypothetical Problem for Policy Paper - President Carter, in response to the false alarm described in previous lecture, asks his national security advisor to give him policy options to reduce risk of false alarm. Each student will play the role of an intern for the national security advisor, who has given his intern three options with a request to evaluate them. The paper is to be written from the historical perspective of 1980, during the Cold War, but the student should consider whether the policy options are still relevant today.

Lecture 9 - Attempts to End Nuclear Arms Race

William J. Perry, James Goodby

This lecture will describe the concepts behind the series of proposals put forward by the United States Government from Truman through Obama. These include proposals to eliminate nuclear weapons on a reciprocal basis, proposals to limit numbers of nuclear weapons held by individual nations and the numbers of nations that possess nuclear weapons, methods of preventing accidents and miscalculations, such as greater transparency, banning the explosive testing of nuclear weapons, and placing limitations on deployments of nuclear weapons. Specific instances of each category will be discussed. The lecture will conclude with an assessment of the outlook for this form of enhancing international security.

Lecture 10 - The Cold War Begins to Thaw

William J. Perry, David Holloway

This lecture will cover the beginning of the end of the Cold War, including Gorbachev's introduction of Détente, Glasnost, and Perestroika in the Soviet Union, the ending of the Warsaw Pact, and the unification of East and West Germany. Requirements for the rewrite of the first policy paper will also be discussed.

Lecture 11 – The Ending of Cold War

William J. Perry, Andrei Kokoshin

This lecture will cover the dissolution of the Soviet Union and why the Cold War ended with so little bloodshed. Andrei Kokoshin will discuss the Soviet coup, military action in the Baltics, and Yeltsin's rise to power.

Lecture 12 – Post Cold War: Problems and Opportunities (1)

William J. Perry

This lecture will cover the problems and opportunities presented at the end of the Cold War, specifically in relations to nuclear weapons disarmament. Topics covered include the economic and social crises in the former Soviet states, attempts to bring Eastern Europe into NATO, the Bosnian Crisis, the CTBT debate in 1996, stockpile stewardship and the US withdrawal from the ABM treaty.

Lecture 13 – Nuclear Terrorism - Nightmare 1

William J. Perry, Martha Crenshaw

This lecture will cover hypothetical scenarios of nuclear terrorism in the post-9/11 era. How likely is this scenario? Why hasn't it happened yet? What would a group like Al Qaeda do if they acquired fissile material or a nuclear weapon?

Lecture 14 — Regional Nuclear War - Nightmare 2

Ravi Patel

This lecture will cover proliferation issues, including the NPT and current proliferation problems such as North Korea and Iran. The focus of the lecture will be on the danger of a regional war and the nuclear programs of Pakistan and India. Attention will also be paid to nonproliferation initiatives, such as Stanford's Track II program.

Lecture 15 – Post Cold War: Problems and Opportunities (2)

Ashton Carter, William J. Perry

This lecture will cover the problems and opportunities presented at the end of the Cold War, and in the post-9/11 era.

Lecture 16 – Non-Governmental Responses to Nuclear Dangers

William J. Perry, Joseph Cirincione

This lecture will cover the responses to the threat of nuclear weapons from such groups as the Nuclear Threat Initiative (NTI), the Ploughshares Fund, the Nuclear Security Program, Global Zero, and the William J. Perry Project.

Lecture 17 – Governmental Responses to Nuclear Dangers

William J. Perry, George Shultz

This lecture will cover governmental responses to nuclear dangers, emphasizing that the nuclear danger is real and grave and governmental actions today are not commensurate with this threat. Topics covered include the Reykjavik summit, Project Sapphire, Summit meetings on fissile material, and new START.

Lecture 18 – Nuclear weapons today

William J. Perry

This lecture will cover the role of deterrence and nuclear weapons in today's new security environment, and some of the ways in which governments and citizens can contribute to lessening nuclear dangers.