Department of Political Science
University of the Punjab, Lahore

Course Outline

Programme	Diplomacy and Strategic Studies	**Course Code**		**Credit Hours**	3
Course Title	**Politics of Strategic Weapon Systems**				

Course Introduction

The Nuclear Age began with the World War II Manhattan Project (1942–46), which culminated in the Trinity test on July 16, 1945, of the "Gadget" and the August 1945 bombings of Hiroshima and Nagasaki. The Project was led by Gen. Leslie Groves; physicist J. Robert Oppenheimer directed the scientific research. The Trinity test took place on a test range north of Alamogordo, New Mexico. Gadget was a somewhat less than 20-kiloton implosion-type fission device. Its yield was the equivalent of the bomb load of 2000 fully loaded WWII B-29s. Reacting to the test, Oppenheimer quoted the Bhagavad-Gita: "I am become Death, the Shatterer of Worlds."

In 1946, Bernard Brodie, one of the Wizards of Armageddon, observed "Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them. It can have almost no other purpose." Brodie here put deterrence front and center. Also in 1946, General H. A. P. Arnold provided a hint of how to think about deterrence: "[O]ur first line of defense is the ability to retaliate even after receiving the hardest blow the military can deliver." This is about striking second, about being able to absorb a nuclear blow, having forces that would survive, and being able to retaliate and punish the enemy. This course examines the political aspects of strategic weapon systems, including their development, deployment, and use. It analyzes the role of these systems in international relations, global security, and national defense strategies.

Learning Outcomes

On the completion of the course, the students will:

1. Be acquainted with the basic concepts and major debates in international relations
2. Be equipped with sufficient knowledge of prevalent issues
3. Have a thorough overview of international relations that will help them in further, more advanced courses
4. Design a significant roadmap for future discussions and debates to enhance their intellectual caliber

5. Receive an impressive collection or reading and reference material to help them in future research projects and similar research based activities		
Course Content		**Assignments/Readings**
Week 1-2	Introduction - Overview of strategic weapon systems - Historical context: Cold War and beyond	Krell, G. (1979). Military Doctrines, New Weapons Systems, and Arms Control: Technological Developments and Political Issues. *Bulletin of Peace Proposals*, *10*(1), 38-46.
Week 3-4	Theories of Deterrence - Classical deterrence theory - Extended deterrence - Nuclear deterrence - Conventional deterrence	Snyder, R. C. (1961). *Deterrence, Weapon Systems, and Decicion-making* (Vol. 2, No. 3). US Naval Ordnance Test Station.
Week 5-6	Strategic Weapon Systems - Nuclear weapons - Ballistic missile defense - Cruise missiles - Hypersonic weapons - Space-based weapons	Leys, N. (2018). Autonomous weapon systems and international crises. *Strategic Studies Quarterly*, *12*(1), 48-73.
Week 7-8	Global Security Regimes - Non-Proliferation Treaty (NPT) - Strategic Arms Reduction Treaties (START) - Intermediate-Range Nuclear Forces Treaty (INF) - Missile Technology Control Regime (MTCR)	Jervis, R. (1982). Security regimes. *International organization*, *36*(2), 357-378.
Week 9-10	National Security Strategies	Drew, D. M., & Snow, D. M. (1988). *Making strategy: An introduction*

	- US nuclear posture - Russian nuclear doctrine - Chinese nuclear strategy - Indian and Pakistani nuclear strategies	*to national security processes and problems* (pp. 163-174). Alabama: Air University Press.
Week 11-12	National Security Strategies - US nuclear posture - Russian nuclear doctrine - Chinese nuclear strategy - Indian and Pakistani nuclear strategies	Hare, F. B. (2019). Precision cyber weapon systems: An important component of a responsible national security strategy?. *Contemporary security policy*, *40*(2), 193-213.
Week 13-14	Ethical and Legal Considerations - Just war theory - International humanitarian law - Arms control and disarmament	Amoroso, D., & Tamburrini, G. (2020). Autonomous weapons systems and meaningful human control: ethical and legal issues. *Current Robotics Reports*, *1*, 187-194.
Week 15-16	Future of strategic weapon systems Emerging technologies and their implications	Sechser, T. S., Narang, N., & Talmadge, C. (2019). Emerging technologies and strategic stability in peacetime, crisis, and war. *Journal of strategic studies*, *42*(6), 727-735.

Textbooks and Reading Material

The lectures will supplement discussions through books and online academic material. The objective would be to engage students in reading and listening to expert opinions to develop their own understanding of various concepts that are essential in the subject. The curriculum will not depend on a fixed set of readings and online lectures but will diversify to accommodate research articles and opinions as well as interviews to provide a broad spectrum analysis and discourse.

Recommended Books (material can be provided as lectures proceed)
1. "The Politics of Strategic Weapons: An Introduction" by Richard K. Betts (2019)

2. "Strategic Weapons and the Politics of Deterrence" by Robert Jervis (2018)
3. "The Strategic Arsenal: Politics and Policy in the Development of Nuclear Weapons" by Matthew Kroenig (2018)
4. "Nuclear Politics: The Strategic Causes of Proliferation" by William C. Wohlforth (2018)
5. "The Politics of Ballistic Missile Defense" by David W. Kearn Jr. (2019)
6. "Strategic Stability and the Politics of Nuclear Weapons" by Elbridge A. Colby (2018)
7. "The Nuclear Revolution: International Security in the 21st Century" by Thomas G. Mahnken (2018)
8. "Strategic Deterrence in the 21st Century: Costs, Benefits, and Alternatives" by the RAND Corporation (2018)
9. "The Politics of Nuclear Strategy" by Lawrence Freedman (2019)
10. "Strategic Arms Control and the Politics of Nuclear Weapons" by the Brookings Institution (2019)

Teaching Learning Strategies

1. Relevant material will be provided beforehand to the class both in printed and electronic form to match with the course contents designed
2. Reciprocal teaching method can be implemented to allow students a chance to speak their mind and discuss their problems
3. Brainstorming sessions will be encouraged with instructional scaffolding to allow students to develop their intellectual capabilities before being introduced to technical subjects
4. Didactic questioning by the instructor will be a viable teaching tool to initiate small group discussions in a think-pair-share collaborative teaching environment.
5. Individual presentations may also be assigned to exclusively focus on students with learning difficulties or exceptional students with a potential to offer more to the class environment.

Assignments: Types and Number with Calendar

1. Week Four: Student report submission for previous lectures taught
2. Week Six-Eight: Surprise Quiz or Show-and-Tell Presentation on topics covered
3. Week Eleven: Research Report post-Midterms
4. Week Fifteen: Grouped presentations of Poster Competition on topics assigned

Assessment

Sr. No.	Elements	Weightage	Details
1.	Midterm Assessment	35%	Written Assessment at the mid-point of the semester.

2.	Formative Assessment	25%	Continuous assessment includes: Classroom participation, assignments, presentations, viva voce, attitude and behavior, hands-on-activities, short tests, projects, practical, reflections, readings, quizzes etc.
3.	Final Assessment	40%	Written Examination at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.