**Fall 2016 Courses**

**Life in a Nuclear-Armed World – FRS 141**

Zia Mian

This course will look at what it has meant to live with the bomb in America, how and why the bomb has spread to other states, the threat of nuclear terrorism, and the links between nuclear weapons and civilian nuclear energy programs. It will also look at what has happened after the April 2009 speech by President Barack Obama declaring that, "As the only nuclear power to have used a nuclear weapon, the United States has a moral responsibility to act... So today, I state clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons." In this course, we will unpack some of the meanings of the nuclear age, using scholarly and popular writings as well as movies and documentary films about "the bomb." We will look at the design, development, production, and maintenance of a nuclear arsenal, and the associated economic, political, and environmental costs, as well as examining people who lived and worked in communities as part of the nuclear complex. We shall look also at the struggles of the anti-nuclear movement in its efforts to restrain decision-makers, end arms races, and to ban the bomb.

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**Scientists Against Time – FRS 117**

Harold Feiveson

This seminar will explore some of the critical contributions of (mostly Allied) scientists, engineers, and mathematicians during World War II. Topics will include radar; the Spitfire and the Battle of Britain; cryptography and the breaking of the German Enigma code; microwave radar, operations research, and other technical breakthroughs in the Battle of the Atlantic against German submarines; the great advances in medicine — penicillin, anti-malarials, DDT, and others — during the war; amphibious craft, advanced aircraft carriers, and the B-29 Superfortress in the Pacific theater; navigation aids, the proximity fuse, and the Mustang P-51 and the erratic history of strategic bombing; tides, weather, artificial harbors, deception in the D-Day invasion; and the Manhattan Project to develop the atomic bomb.