SA.630 (GLOBAL RISK)

SA.630.000. Global Risk Independent Study. 4 Credits.
Indepenend Study for the Global Risk program under supervision of a faculty member. Generally, students take an independent study when they wish to research a subject which is not covered by any course at SAIS.

SA.630.720. Microeconomic Risk and International Trade. 4 Credits.
The aim of this course is two-fold. First, we study the microeconomic effects of incentives on the consumer and the producer and their relationship with efficiency. By developing a detailed analysis of the market system, the course provides the framework for policy intervention and the assessment of their effectiveness. Second, we develop an understanding of how the economy works at the aggregate level: the foundations for macroeconomic analysis explain how production, employment, prices and interest rates are jointly determined. By focusing on the economic interaction of individuals, the course develops the theoretical and empirical foundations required to analyze the various macroeconomic policies that affect economic activity.

SA.630.721. Macroeconomic Risk and International Finance. 4 Credits.
This course highlights the economic sources of risk in the international arena. Different economies interact by trading goods and services and by exchanging progressively larger capital flows. In the age of globalization, the economic interdependence of countries generates highly novel challenges: exchange rates are not determined solely by capital movements, but also by the evolution of governance in the international monetary system — a system in which the Eurozone, the newest currency union, is emerging as a global and volatile player. The course develops a rigorous analysis of the different arrangements in the international financial system and their effects on trade direction and intensity and international capital flows. This approach allows us to address some of the most relevant sources of uncertainty in international economics: the future of gains from trade while new trade agreements are being discussed, the benefits of currency unification and the risks for sovereign debt, the heated debate regarding the relationship between global imbalances and the financial crisis of 2007-08 while capital accounts are becoming progressively liberalized.

SA.630.723. Math Review for Risk Assessment. 2 Credits.
This course develops the basic quantitative tools that are necessary for risk analysis. It gives a review of basic mathematical concepts used in economics and risk analysis, including pre-calculus and calculus principles. It also develops tools for data management using Excel. The course therefore provides students with a ready-to-use statistical toolbox that can be used during the remainder of the program.

SA.630.724. Introduction to Statistics. 4 Credits.
In order to understand and evaluate risk and uncertainty it is essential to have a strong command of basic statistical concepts and techniques. This course is designed to furnish students with the fundamental tools of statistical analysis, including analysis of descriptive statistics, probability distributions, statistical inference and related tests, correlation and conditional expectation. In addition to providing familiarity with statistical principles, the course will also include an introduction to basic statistical software packages, namely STATA and advanced tools in Excel. It is a required course for quantitative approaches to risk assessment.
SA.630.740. Risk in International Politics and Economics. 4 Credits.
This is a course on social science research methods as they apply to
decision-making under conditions of uncertainty. In other words, it looks
at how the skills of a social scientist can be put to use in the 'real world'.
The course begins by looking at how decision makers anticipate future
events, it explores what evidence they consider and what they ignore, and
it looks at the standard models they apply in projecting the future based
on the present. The case studies applied in this early part of the course
focus on seemingly straightforward economic and financial questions.
The problem is that most of the predictions that were made in these
areas ended in disaster. Hence the course turns to explore the bias that is
built into estimates of the future to understand whether the problem lies
in the way the world works or in how we try to understand it. It introduces
students to a conceptual vocabulary based on systems theory to make
it easier to build more complex relationships into the analysis. And it
explores the unintended consequences of policy decisions. Here the case
studies move from economics to politics and from crisis to stagnation.
This does not offer much of an improvement. Therefore the course makes
a third analytic turn to bring the dynamics of human interaction more
firmly into focus. It looks at negotiation, communication, and culture as
possible sources of error or misunderstanding. The case studies focus on
conflict, terrorism, and popular protest. By the end of the course students
have a better grasp of where their predictions are likely to falter. They will
also understand why such predictions must nevertheless be made. Risk
in the international political economy derives from decision-making under
conditions of uncertainty. The problem is that uncertainty is inevitable,
but decisions must be made regardless of this.

SA.630.742. Instability and Political Change in Consolidated
Democracies. 4 Credits.
The purpose of this course is to use a case study methodology to
assess how even established democratic societies can rapidly become
politically unstable. Again and again, we see nations that are regarded
as successful and prosperous democracies descending into acute
political turmoil. It looks at negotiation, communication, and culture as
possible sources of error or misunderstanding. The case studies focus on
conflict, terrorism, and popular protest. By the end of the course students
have a better grasp of where their predictions are likely to falter. They will
also understand why such predictions must nevertheless be made. Risk
in the international political economy derives from decision-making under
conditions of uncertainty. The problem is that uncertainty is inevitable,
but decisions must be made regardless of this.

SA.630.743. Strategic Foresight for Political Risk Analysis: Working with
Scenarios. 4 Credits.
Geostategic risk is the term used to bracket one of the most important
collections of variables in macroeconomic policymaking, trade and
investment. The onset of war or other forms of violent conflict can close
access to foreign markets, disrupt global supply chains, threaten energy
resources, and depress business and consumer confidence. Therefore, of
primary concern are the points at which diplomacy gives way to conflict
and conflict results in violence. Terrorism is similarly disruptive, but
the actors involved are different and the scale of direct destruction is
(usually) more limited. But these are only the most obvious sources of
governmental risk. Governments and business leaders should also
pay attention to any rise in cross-cultural tensions; they should look at
migration flows, human trafficking, and organized crime. Cross-border
reputational risk is also a potential problem: today's special relationship
can easily develop into tomorrow's embarrassment and the next day's
major problem. Finally, there are the unique dynamics associated with
multilateral bargaining and international organizations. Students will
come away from this course understanding how the broad array of
'international relations' factors into political and economic calculations.
They will gain exposure to a range of causal mechanisms tied to issues
like the onset of war, terrorist attacks, criminal activities, cross-cultural
sensitivities, complex negotiations and supranational institutions. Along
the way, students will prepare case studies to illustrate just how these
risks have emerged in diverse parts of the world, but also how they have
been managed from the perspective of a single firm or government.

SA.630.760. Big Data and Cyber Security. 4 Credits.
The course will explore the foundations of Big Data, including its
foundations in computing technology and statistics. It aims at
understanding the role of computers in our lives, and how this generates
a trail. Social implications of increased knowledge, surveillance, and
behavioral prediction made possible by Big Data, and the ethical tradeoffs
will also be considered. While the course includes an analytics project, no
prior technical experience is required.

SA.635.700. Microeconomics and International Trade Theory. 4
Credits.
The aim of this course is two-fold. First, we study the microeconomic
effects of incentives on the consumer and the producer and their
relationship with efficiency. By developing a detailed analysis of the
market system, the course provides the framework for policy intervention
and the assessment of their effectiveness. Second, we develop an
understanding of how the economy works at the aggregate level: this
does not only provide the foundations for macroeconomic analysis
but, by focusing on the economic interaction of individuals, the course
develops the theoretical and empirical foundations required to analyze
international trade, its evolution toward global value chains and the
challenges to contemporary commercial policy.
SA.635.709. Mathematics and Statistics. 4 Credits.
In order to understand and evaluate risk and uncertainty it is essential to have a strong command of basic statistical concepts and techniques. This course is designed to furnish students with the fundamental tools of statistical analysis, including analysis of descriptive statistics, probability distributions, statistical inference and related tests, correlation and conditional expectation. In addition to providing familiarity with statistical principles, the course will also include an introduction to basic statistical software packages, namely STATA and advanced tools in Excel. It is a pre-requisite course for quantitative approaches to risk assessment. Moreover, this course develops the basic quantitative tools that are necessary for risk analysis. It gives a review of basic mathematical concepts used in economics and risk analysis, including pre-calculus and calculus principles. It also develops tools for data management using Excel. The course therefore provides students with a ready-to-use statistical toolbox that can be used during the remainder of the program.

SA.635.730. Risk and Crisis in the Global Economy. 4 Credits.

SA.635.735. Quantitative Models for Risk Assessment. 4 Credits.