# INTERNATIONAL AFFAIRS (INTAF)

INTAF 500: Research Design

3 Credits

This course provides a general overview of empirical research methods appropriate for international affairs specialists. The approach is handson, with a focus on learning practical skills for evaluating real-world events.

INTAF 501: Water and Sustainable Development

3 Credits

This course addresses the scientific theory and practical considerations necessary to manage water resources in an international sustainable development context.

INTAF 502: Science, Technology, and International Policy

3 Credits

Examines science and policy communities, importance of science and technology to international affairs, scientific issues likely to affect international policy.

INTAF 503: Hazards, Disasters, and International Affairs

3 Credits

Hotspots, tipping points, and international approaches to prepare for, respond to, and recover from hazards, disasters and complex humanitarian emergencies.

INTAF 504: Political Economy of Development and Growth

3 Credits

Theories of economic growth and established empirical evidence are used to explain differential levels of ecomnomic development across the world. INTAF 504 Political Economy of Development and Growth (3) This course examines the reasons why different nations realize diverse long-run levels of welfare. Possible determinants of the differential outcomes include different rates of accumulation in physical capital, rates of technological innovation, the impact of human and financial capital, and the impact of demographic changes with increasing levels of economic development. Further extensions include a consideration of the impact of the openness of economies, geographical location, and exposure to disease vectors. In addition, the course considers the impact of institutions, including domestic institutions, international institutions, as well as multilateral forms of cooperation between economies. Types of institutions to be considered will include micro-level institutions (those that function most obviously at the individual agent level), as well as institutions that govern societies at more aggregate levels. The course also examines evidence on whether there are interaction effects between the determinants of growth (for instance, whether the impact of openness is different under democratic or autocratic political governance). The course will consider relevant theory, but will place an emphasis on examining available data sources in order to test alternative explanations. Given the International Affairs context, particularly strong emphasis is placed on drawing from literatures that reflect the strong

interdisciplinary nature of International Affairs programs. This includes perspectives from economics, law, political science and sociology.

INTAF 505: Strategy, Conflict, Peace

3 Credits

The course teaches the principal solution concepts to the analysis of strategic interaction in static and dynamic contexts, and under incomplete information. INTAF 505 Strategy, Conflict, Peace (3) The purpose of this course is to provide the analytical tools required to deal with international affairs situations that involve strategic actions - that is, actions whose outcome depends on the interaction with other decision makers. While the approach of the course is applied, with recourse to many illustrations by real examples, the primary concern of the course is with the development of the appropriate analytical tool kit to be able to deal with choice in the presence of strategic interaction with other agents. The core tool kit is provided by game theory, and this is the focus of the course. Coverage will be of the representation of games, solution concepts in static as well as dynamic games, and the role of information in games. While primary attention will be on non-cooperative strategic interaction, some results from cooperative game theory are also considered. Presentation of core analytical techniques will be in the form of lectures. Many applications will be presented by course participants. Applications are drawn from concrete examples encountered in the literature. Strong emphasis is placed on applications that are encountered by agents in international contexts. Since such international agents span the range from nations, political parties, firms, multinationals, households and firms, applications are multidisciplinary. Applications are drawn from (but not limited to): voting and agendas; reciprocity; surprise attack and disarmament; nuclear deterrence; randomization of promises and threats; sequential bargaining; time consistency; reputation; location games; partnership games; tariffs; Median Voter Theorem; political participation; contracts; guarantees; reputation and incomplete information; signaling; cheap talk; tournaments; coalition formation and the importance of stable preference-driven cooperation in an anarchic world.

INTAF 506: International Economics: Principles, Policies, and Practices

3 Credits

This course addresses the principles, policies, and practices in international trade and finance that are fundamental for understanding international economic relations and the future of the global economy. The course examines the economic principles underlying behaviors and policies in international and domestic public affairs and explains how to evaluate and conduct economic analyses.

INTAF 508: Domestic Influences on Foreign Policy

3 Credits

This course will examine how domestic politics influences the formulation and implementation of foreign policy in the United States and other major powers. INTAF 508 Domestic Influences on Foreign Policy (3) This course will examine how domestic politics influences the formulation and implementation of foreign policy in the United States and other countries. Among the factors considered will be the role of lobbyists, special interests and bureaucratic politics. Among the major topics covered will be national identity, the politics of national security since World War II, foreign policy formulation in China, the domestic sources of American foreign policy, case studies in buying influence, the influence of think tanks, public opinion and ethnic groups, how other

countries attempt to influence American foreign policy and how domestic groups in other countries try to influence their own foreign policy. This course will be extremely useful to any student wishing to understand how governments formulate and implement foreign policy and how that has been affected by domestic politics in the past and today. Students will learn about the history of political influences on foreign policy and how that had changed over time, especially since the end of the Cold War. Students will also develop their ability to think critically and to apply that thinking to historical and present-day examples of interest groups influencing foreign policy. The course will also emphasize professional skills including the development of the student's ability to write and to make in-class presentations.

#### INTAF 510: Cross Cultural Conflict Resolution

#### 3 Credits

Across the globe there are more laws and provisions in place to protect human beings from discrimination than at any other time in history and yet there are more incidents of conflict, intolerance, bias, and violence than ever. How are we to make sense of these two competing realities? How can we become ethical leaders in the face of such contrasts and complications? This course combines perspectives from communications, psychology, sociology, political science, law and legal studies, human rights, identity-based studies, media studies, and cultural studies to engage questions of how cultural difference and discrimination play a role in conflict and resolution. Topics to be covered are 1) how societies create inegalitarian categories of identity, 2) how those divisions create conflict, and 3) how those divisions hinder conflict resolution. The course will look at a variety of ways that societies come to categorize forms of human life according to religion, nationalism, patriarchy, ethnic identity, and other forms of social division and stereotyping. One key area we will address is the development of law and other instruments that both protect and disenfranchise vulnerable populations. We will also look at strategies for cross-cultural community development and peace building. The topics will be studied in a crosscultural context allowing students to consider these issues from a range of global perspectives.

# INTAF 511: Ethical Dimensions in Food and Agricultural Governance

# 3 Credits

Famines around the world have long made news headlines, and in recent years the news includes a discussion of the so-called "diseases of affluence" that come about, in part, due to an overabundance of food (i.e., Type II diabetes, heart disease). While, the natural environment affects regions of food security and insecurity, the policy environment plays an equally strong role in constructing our global food systems. For example, how have changing agricultural policies shaped our food safety problems, such as E. coli contaminated meat or spinach? How have government policies related to labeling of organics shaped the growth of consumer demand for organic agriculture and food products? This class analyzes the socio-economic, political, and cultural construction of our food systems and the ways in which institutions and individuals involved with these systems have experienced dramatic changes in the twentieth and twenty-first centuries. We also explore and evaluate the ethical dimensions of agriculture and food policy at the global, regional, and national levels and the ways these policies impact the flow of food around the world (e.g., the World Trade Organization, transnational corporations, NAFTA, the European Union, and national governments). By the end of this course, students will be able to describe the institutions and organizations that are involved in the provision of food at national

and international levels, identify problems with the dominant agriculture and food system, and evaluate the strengths and weaknesses of many of the proposed solutions for creating a more sustainable and equitable food system.

INTAF 512: Institutional Change and Development

### 3 Credits

Over the past two decades, the phrase ¿Institutions matter¿ has become a leitmotif in economics and policy circles. This course is an overview of the research (both theoretical and empirical) on institutions as the fundamental driver for economic development, with a particular emphasis on institutional change and institutional/policy reforms. The purpose of the course is to develop an understanding of the institutional foundations of an economy while critically assessing the conventional discourse in the discipline. Throughout the course, we approach institutional change from a historical perspective. Our focus is on institutional challenges faced by developing nations. In light of the recent institutional turmoil in Western countries, we also discuss institutional erosion and the rise of populism in developed nations.

INTAF 513: Applied Time Series Analysis for Social Science Contexts

### 3 Credits

This course is designed to introduce the modeling challenges presented by time series data, and panel data with a large time dimension. Emphasis is placed on developing an understanding of the distinction between stationary and nonstationary (constant mean, variance vs. nonconstant mean and variance data) for estimation purposes in time series contexts. Since nonstationarity is very prevalent in social science applications, understanding estimation approaches to nonstationary data is crucial for nonspurious estimation results. The course will place considerable emphasis on the development of maximum likelihood vector error correction mechanism estimation as a solution to nonstationarity. Throughout, problem sets and exercises place emphasis on real world applications and estimation challenges.

# Prerequisite: INTAF 803

INTAF 514: International Development and The Ethics of Development Assistance

## 3 Credits

This course will provide an overview of the study of international development as a field and as an idea. International development has changed considerably post WWII, not only with some of the same organizations still participating in international development, but also with many new actors and organizations. Alongside organizations and actors have been many academic fields that study and influence aspects of international development, including: anthropology, economics, history, political science, sociology, demography, and public health. We will explore major approaches to international development historically and in the present, as well as consider the effectiveness of international development and the ethics of development assistance. The primary goals of this course are for you to: cultivate a base of knowledge about international development, gain familiarity with topics that people in a variety of disciplines study and shape as it relates to international development, and develop an informed and critical perspective as it relates to the practice and ethics of international development.

INTAF 534: Political Economy of Energy and Extractive Industries in Africa (Oil and Mining)

#### 3 Credits

Given the rising global demand for energy and resources, Africa's production of oil and solid minerals has already produced very significant positive as well as negative impacts on the continent's political, economic, and social conditions. This seminar examines the extractive industry-driven changes in Africa's political economy, as well as in the continent's foreign relations. Students will examine the institutional basis under which the expansion of the industry is taking place in Africa. This will involve discussions of the institutional characteristics of Africa, including issues of land tenure and property rights laws, how institutional systems are changing in order to facilitate the industry's expansion, and the repercussions of these changes upon society. The course also interrogates the relevance of international efforts to mitigate some of the adverse impacts of the industry. Among such efforts is the UN Guiding Principles for Business and Human Rights. Overall this seminar examines the industry's impact on Africa's socioeconomic development and global relations, and concludes with how African countries might deal with the adverse impact of the Oil and Mining industry.

Cross-listed with: AFR 534, PLSC 534

INTAF 567: Terrorism

## 3 Credits

This seminar provides a general and cumulative investigation into the phenomenon of terrorism from a Political Science perspective. It is a study of terrorism with an attention to what it is 'theoretically, conceptually, empirically' and how and why it is used by nonstate actors; its political, economic, and social root causes; its consequences to political, economic, and social institutions and outcomes; and the implications of current research on terrorism and counterterrorism. Although the study of terrorism has a long pedigree in the social sciences, research by political scientists became more extensive following the September 11, 2001 attacks on the World Trade Center. This course critically evaluates this new literature, noting its contributions, limitations, gaps, and opportunities for future discovery. Much of the contemporary scholarly literature on terrorism makes use of state-of-the-art political science research methods and quantitative analysis.

INTAF 568: Psychology of Terrorism

# 3 Credits

This course examines the causes and consequences of terrorism, and the responses to terrorism from a psychological perspective, to include Christian extremism, Islamic Fundamentalism, Jihadism, Left wing extremism and Marxist terrorism, Right wing extremism, and single-issue terrorism. It draws on research from a variety of disciplines in order to examine terrorist ideologies; the motives, strategies, and behaviors of terrorists and terrorist leaders; how people come to join terrorist groups; methods of recruitment; terrorist tactics; the psychological consequences of terrorism on individuals, communities, and global societies; psychological counterterrorism; reactions to counterterrorism efforts; terrorism prevention; and possibilities for disengagement and deradicalization.

Cross-listed with: PLSC 568, PSY 568

INTAF 590: Colloquium

3 Credits

Continuing seminars that consist of a series of individual lectures by faculty, students, or outside speakers.

INTAF 594: Research Topics

1-15 Credits/Maximum of 15

Supervised student activities on research projects identified on an individual or small-group basis.

INTAF 595: Internship

1-12 Credits/Maximum of 12

Supervised off-campus, nongroup instruction, including field experiences, practicums, or internships. Written and oral critique of activity required.

INTAF 596: Individual Studies

1-9 Credits/Maximum of 9

Creative projects, including nonthesis research, that are supervised on an individual basis and that fall outside the scope of formal courses.

**INTAF 597: Special Topics** 

1-9 Credits/Maximum of 9

Formal courses given on a topical or special interest subject which may be offered infrequently.

INTAF 597B: \*\*SPECIAL TOPICS\*\*

3 Credits

INTAF 598: Special Topics

1-9 Credits/Maximum of 9

Formal courses given on a topical or special interest subject which may be offered infrequently.

INTAF 599: Foreign Studies

1-12 Credits/Maximum of 24

Courses with a research orientation offered in foreign countries by individual or group instruction.

INTAF 603: Foreign Academic Experience

1-12 Credits/Maximum of 12

Foreign study and/or research approved by the graduate program for students enrolled in a foreign university constituting progress toward the degree.

INTAF 801: Actors, Institutions, and Legal Frameworks in International Affairs

3 Credits

Addresses the principal actors, institutions, and legal frameworks which operate in international relations.

INTAF 802: Foundations of Diplomacy and International Relations Theory

3 Credits

Addresses the central tenets of diplomacy and international relations and theories and concepts that underpin the study of international relations.

INTAF 803: Multi-sector and Quantitative Analysis

3 Credits

Introduces students to quantitative methods applicable to various issue areas, including international relations, economics, business, law, education, health, and environment.

INTAF 804: Global Cultures and Leadership

3 Credits

Introduces students to cultural theories and to an understanding of how socio-cultural beliefs may impede or accelerate social change.

INTAF 810: Energy, International Security, and the Global Economy

3 Credits

This course explores the economic, political, and strategic implications of ongoing trends in global energy markets, particularly oil and gas markets. INTAF 810 Energy, International Security, and The Global Economy (3) This course explores the economic, political, and strategic implications of ongoing trends and structural shifts in global energy markets. It focuses especially on international markets for crude oil and natural gas; attention is also devoted to nuclear energy, the international nuclear industry, and nonproliferation challenges. Students will develop a deep appreciation of the role of energy, and especially hydrocarbon-based energy, in contemporary international affairs. They will learn about the historical development and evolution of hydrocarbon-based energy and the international oil and gas industry; about the various types of contractual arrangements for cross-border investment in upstream oil and gas development and what the differences among these types of agreements reflect regarding the shifting balance of power between resource-owning national governments and foreign investors; and about why and how major energy market players shape their interactions on the basis of political and strategic calculations, along with commercial and economic considerations. They will also learn about the economic and political factors affecting the contribution of nuclear energy to the global energy balance; about the major proliferation risks associated with civil nuclear technology; and about the international regime that has been developed to mitigate these risks and the most pressing challenges to this regime.

INTAF 811: Estimative Analysis in International Strategy

3 Credits

Analytical methods to estimate future conditions as they might influence international policy, negotiations, or strategic planning.

INTAF 812: The Role of Intelligence in International Relations

3 Credits

This course examines how governments gather intelligence, how it is analyzed and what impact it has on policy makers.

INTAF 814: U.S. Policy in the Middle East

3 Credits

This course focuses on the strategic challenges facing U.S. policymakers in one of the world's economically, politically, and strategically most important regions. INTAF 814 U.S. Policy in the Middle East (3) This course explores the strategic challenges facing U.S. policymakers in the Middle East, one of the world's economically, politically, and strategically most important regions. It draws on readings and class discussion to help students develop both a sense of the historical evolution of U.S. policy toward the Middle East and an analytic framework for understanding current policy debates. Students will develop a deep appreciation of the impact of U.S. engagement in the Middle East on modern international history and contemporary international affairs. They will learn about the Middle East's place in the United States post-World War II and post-Cold War grand strategy, about America's decades-long quest for strategic primacy in the region, and about competing visions among American elites for the exercise of that primacy. They will examine the key bilateral relationships (with Saudi Arabia, Israel, and -since 1979 - Egypt) that have shaped U.S. foreign policy toward the Middle East. They will also explore America's long struggle with Saddam Hussein's Iraq and evaluate the U.S. project to build a post-Saddam Iraq that would help consolidate America's post-Cold War dominance in the region. Against this backdrop, students will also learn about major indigenous challenges to American hegemony in the Middle East - e.g., the Islamic Republic of Iran, Islamist resistance movements, and rising demand for participatory Islamist governance among regional publics - and assess U.S. approaches to dealing with these challenges. Students will consider alternative perspectives on jihadi extremism and whether America's self-declared "war on terror" has been self-defeating. Likewise, they will examine America's response to the Arab Awakening, with a particular focus on U.S. military interventions in Libya and (indirectly) in Syria, and Turkey's evolving role in the region. Finally, they will look at Russia's resurgence in Middle East affairs and at the impact of China's deepening engagement in the Middle East and the prospects for Sino-American competition for influence there.

INTAF 815: Dynamics of International Economic Order. Law, Politics, and Power

3 Credits

This course examines the cross-cutting relationship between political power and global economic governance. INTAF 815 Dynamics of International Economic Order. Law, Politics, and Power (3) This course explores the cross-cutting relationship between political power and global economic governance. It considers how nation-states define international economic order through the creation of legal frameworks and rules-based regimes; how shifts in the international distribution of power impact these frameworks and regimes; and how, in contemporary context, the United States and China approach global economic governance as part of their grand strategies. To ground their engagement, students will appraise philosophical and analytical perspectives on international economic exchange and economic order - mercantilism, liberalism, realism, and institutionalism. They will examine the concept of hegemonic hegemony and debates over whether economic openness requires a hegemon. Against this backdrop, students will investigate the relationship between American primacy and international economic order. They will consider how U.S. primacy and America's strategic aspirations coming out of World War II shaped the postwar economic order with regard to multilateral trade liberalization (the General Agreement on Trade and Tariffs) and monetary relations (the Bretton Woods gold exchange

standard). They will evaluate challenges to America's vision of postwar economic order posed by Asian developmentalism and "mercantile realism." Likewise, they will assess the OPEC revolution, the American/ Western response thereto, and the impact of these developments on the international economic order. Students will continue examining the relationship between American primacy and international economic order by reviewing interpretations of economic globalization as a recasting of the original, post-World War II pax Americana. They will look at how reconstituting American primacy through globalization affected multilateral trade liberalization (the World Trade Organization), monetary relations (the post-Bretton Woods dollar standard), and financial liberalization. They will also evaluate competing visions of post-9/11 American primacy - liberalism, neoconservatism, and realism. Students will then turn to the impact of China's rise on international economic order. They will assay the historical backdrop of China's rise, ongoing processes of economic reform and modernization, Chinese grand strategy, and the challenges China's rise poses to international frameworks for trade and investment, finance and monetary relations, and energy. They will also consider the implications of China's rise for Asian regionalism, the BRICS (Brazil, Russia, India, China, South Africa), and the "global South." Finally, through case studies on nuclear energy and nonproliferation and on Iran sanctions, students will look at how contestation between alternative views of international order affects global governance in specific arenas. They will also reflect on the ramifications of these cases for the future of international economic order.

INTAF 816: War and Peace

## 3 Credits

This course examines how wars begin, how they end and the responsibility of the international community in bringing an end to the fighting and dealing with the effects of the conflict. INTAF 816 War and Peace (3) The course will examine the types and causes of war and how they are brought to an end. It will consider the role of the international community and international organizations in mediating the conflict and helping to bring about peace both through formal negotiations by governments (track I diplomacy) and through the efforts of third parties and nongovernmental entities (track II diplomacy.) It will also address the evolving role of the international community, the concept of responsibility to protect, and how and when outside interventions are undertaken. It will look at war and the origins of humanitarian intervention, conflict analysis, methods and techniques of peacemaking in international conflict including mediation, the role of the UN in conflict peacekeeping and peace-building, and democracy and the economics of war.

INTAF 817: Weapons of Mass Destruction and International Security

#### 3 Credits

Although no nuclear weapon has been used in war in 73 years, they are used every day to affect international security decisions. This course will explore how nuclear weapons revolutionized thinking about war and peace among major powers and how they can become a primary focus of international diplomacy. It will examine why WMD programs (perhaps incorrectly) have come to be seen as a potential cause of war in some contexts and as a primary deterrent to war in others. The course will provide students with the technical understanding of the major classes of WMD (nuclear, chemical and biological weapons) and their effects and it will examine the evolution of international security thinking about their role. It will look both at how major powers (the U.S., Russia and China) conceive of the role of WMD and also how other countries and

sub-national groups might consider them. The course will look at how nuclear and biological weapons in particular are for the first time in a generation becoming of increasing concern to strategic thinkers. Finally it will look at the means the U.S., other major powers and the broader international community have developed to limit and perhaps someday to eliminate the threat WMD pose to international peace and perhaps to human existence.

INTAF 818: U.S. National Security

### 3 Credits

This course examines: 1) how states fight wars and use force; 2) how the characteristics of nuclear and conventional weapons affect strategic thinking; 3) the manner in which the states match interests with capability and domestic politics, 4) civil military relations and 5) how wartime assessment influences policy, and 6) how to present and write professional briefings. The course will focus on both the general pattern among all states and the application of these concepts to U.S. national security. Students will be expected to develop the knowledge and skills to think, speak, and write knowledgeably about the dynamics of U.S. national security specifically and international security more generally.

INTAF 819: Grand Strategies of Established and Rising Powers

#### 3 Credits

This course is about the grand strategies of the world's major powers-states that independently exercise significant influence over their external environments in ways that help shape the overall character of global politics; depending on its foreign policy orientation, such a state may also be described as either an established or rising power. The course develops a framework for understanding and explaining a nation's foreign policy and applies it to analyzing the grand strategies of the most important established and rising powers in contemporary world politics.

INTAF 820: Economic Development and the Environment

#### 3 Credits

This course provides an overview of the economics of environmental policy by focusing on the issue of environmental/resource management and sustainable development. It discusses the role of government interventions in addressing environmental problems, such as pollution, climate change, resource management, etc. The course seeks to convey some of the basic concepts of environmental and resource economics and initiate discussions about environmental policy through real-world examples.

INTAF 821: Property, Poverty, and Development

## 3 Credits

This seminar is for those who are interested in property ownership and the role that it plays in economic development. Case studies will be taken from across the developing world, with a particular focus on Latin America and the Caribbean. Since the time of the philosopher and social reformer, Jeremy Bentham, we have understood that the poor, like others, are more likely to invest in property if they own it. Hernando De Soto has famously argued that non-transparent legal systems, and titling systems in particular, pose severe impediments to the participation of the poor in capitalist economies. Without title, the poor are less likely to invest in their properties and are often unable to access credit. De Soto estimates that for the developing world, the total value of real estate held by the poor (but not formally titled) is more than 20 times foreign direct

investment and more than 90 times all foreign aid for the last 3 decades. The extent of De Soto's influence can hardly be overstated. In the policy world, his work has inspired decades of World Bank-funded titling programs across several continents. In the academic world, his work has inspired soul-searching among economists and development scholars across the methodological spectrum. Some have argued for communal systems of collective land tenure. Others dispute his estimates of property currently owned by the poor and argue that granting legal title has not improved credit access. Some have also argued that titling systems simply replicate current inequalities. Moreover, in societies where women work the land but do not have equal status in society or in law, their land claims are unlikely to be recognized. Yet others have criticized De Soto's emphasis on titling arguing that land titling by itself is unlikely to make a significant impact on poverty reduction without parallel reforms such as improving access to the formal banking system, financial literacy and streamlining business regulations. Finally, others question whether extensive investments in titling systems represent a prudent investment in the conditions of extreme economic scarcity that characterize many developing countries, suggesting that in such circumstances, a more "modest" approach to legal reforms may be more prudent. In summary, this seminar will focus on De Soto's ideas on the importance of property reform in combatting poverty and the critiques, particularly in the context of Latin America and the Caribbean.

INTAF 822: Global Media and Political Journalism

#### 3 Credits

This course traces the history of political reporting in a global context, addresses challenges brought on by the rise of social media and fake news, covers issues of propaganda and censorship, and offers students an opportunity to hone their own skills as political reporters. The course helps students develop a thorough understanding of the way politics and government are reported in the media as well as gain the confidence to make reasoned judgments about the truth and relevance of media coverage, particularly in an international context. Students will develop an appetite for monitoring, analyzing and reacting to current changes in the relations between politicians and political journalists. Students will develop critical thinking skills about political issues and dynamics, strong instincts for finding good political stories, and sharp writing skills with an attention to detail and nuance in reporting.

INTAF 853: Engineering, Law, and Policy Systems

## 3 Credits

This course provides a broad exploration of the relationship between engineering, policy, and law. From driverless cars to Al-powered systems, engineering is transforming public and private spaces. As these new technologies leave the lab and operate in new spaces, each new technology represents a system within that larger, higher-order system. The transformation of these spaces and the interaction of these onceseparate systems will be shaped by, and in turn will shape, the public policies of local, state, national, and global policymaking systems. This interdisciplinary course has two objectives. First, it considers the classic engineering problem of integrating subsystems into a larger, higherorder system. In this class, the larger system includes not only other physical systems in the operating space, but also social, legal, and political systems. Second, it considers traditional legal and policymaking institutions as constrained optimization problems. This course identifies the legal and political constraints engineering solutions must satisfy in order to come online.

Cross-listed with: LPE 853

INTAF 890: Colloquium

3 Credits/Maximum of 999

Continuing seminars that consist of series of individual lectures by faculty, students, or outside speakers.

INTAF 897: Special Topics

1-9 Credits/Maximum of 9

Formal courses given on a topical or special interest subject with a professional orientation that may be offered infrequently; several different topics may be taught in one year or semester.

INTAF 899: Foreign Studies

1-12 Credits/Maximum of 24

Courses with a professional orientation offered in foreign countries by individual or group instruction.