

#### **OSUN Online Courses Summer 2022**

An OSUN Online Course is a single course situated at one institution that enrolls students from multiple OSUN partners. This list provides an overview of the OSUN Online Courses offered by the following partner institutions: American University of Afghanistan, American University in Bulgaria, American University of Central Asia, Ashesi University, Bard College Annandale, Bard College at Simon's Rock, Brac University and Central European University. Enrollment is open to all eligible students at all OSUN institutional partners. The priority deadline for registration is May 2, 2022

**NOTE:** AUCA uses the ECTS credit system. 1 US credit equals 2 ECTS credits.

#### How to apply:

- 1. Fill out this Google form by April 29, 2022. Once you fill it out, your advisor will receive an email requesting their approval.
- 2. Apply for the course on the OSUN portal by May 2, 2022 HERE:
  - Step 1) Click the corresponding link to your preferred OSUN virtual course
  - Step 2) Read through all of the relevant course information and then
  - Step 3) Click "Apply Now"
  - Step 4) Students will need to use their home institution email address to log-in
  - Step 5) Complete the required Profile information
  - Step 6) Answer the required program questionnaires
  - Step 7) Click "Submit Application"

Questions? Contact Zhamilia Irsalieva at osuncourses@auca.kg

Academic Themes and Courses	Page Number/s
Arts and Society Global Activism Through Theater Reparative Practices in the Cultural Archive of Colonialism Women Film Directors	2-3
Civic Engagement Women & The Pandemic: Activism, Leadership, & Global Equity Engagement	3

Democratic Practice Contemporary Issues in Conflict and Security Studies Introduction to Political Science Populism Surveillance and Privacy: Legal, Moral, and Political Issues	3-5
Global Public Health Race, Health and Inequality: A Global Perspective Special Topics: Contemporary Issues in Economic Policy	5
Human Rights Cyber Law Global Policymaking Law, Human Rights and Justice: Anthropological Perspectives	5-6
Liberal Arts and Sciences Ethical Hacking Introduction to Blockchain and Cryptocurrencies Introduction to Public Opinion Research and Analysis	6-7
Sustainability and Climate Business Strategy for a Sustainable Future Extractive Industries Law, Environmental Protection, and Sustainability GIS Applications in Earth Sciences	7-8

# **Academic Theme: Arts and Society**

### **Global Activism Through Theater**

Aimee Michel, Bard College at Simon's Rock 100 level- 3 US / 6 ECTS 4-week-course June 13 - July 8, 2022 Mondays through Fridays, 10:30-12:30 New York Time, 16:30-18:30 Vienna Time

**Bishkek time:** Mondays through Fridays, 20.30-22.30

**AUCA equivalent:** Arts requirement in General Education program

Because of its visceral, communal nature, theater has always been an agent of change across the globe, either directly or indirectly. In this course we will explore how the art form of theater has been used directly and consciously across the globe over the past century as an agent of social and political change. We will begin the course by studying the activist work of Peter Schumann with his Bread and Puppet Theater in the US, The San Francisco Mime Troupe, also in the US,

and the Theatre of the Oppressed of Brazilian theater director and teacher, Augusto Boal. Readings from and about the work of these theater artists will be accessible through Archive.org. Students in the class will present to each other their understanding of the work of these artists. We will then explore theater activism of the current moment around the globe. Students will research how theater influences social and political ideas and policy in their respective countries, and present their findings to the class. Finally, students will work in groups to choose through consensus an issue that they find challenging today and will devise a theatrical way to address this issue. Each group will present/perform their theatrical activism for the class in the last week. Throughout the course of the class, daily/weekly, I will provide prompts based on our work in class and students will respond to them in our Google classroom discussion board.

### Reparative Practices in the Cultural Archive of Colonialism

Katrine Dirckinck-Holmfeld, Bard College Annandale Advanced undergraduate level— 4 US / 8 ECTS 6-week-course: June 4 - July 22, 2022

Thursdays, 09:30-12:00 New York Time, 15:30-18:00 Vienna Time

**Bishkek time:** Thursdays, 19.30-22.00 **AUCA equivalent:** To be confirmed

Credits: Only 6 ECTS credits will be transferred to AUCA

How may we conceive of reparative practices, in situations "beyond repair"? Following a pandemic, were social, political and planetary cracks have widened, artists and cultural workers world-wide play an important role as cultural advocates for social justice and creating small acts of repair in response to different situations, but they also often face repressive systems. The objective of this course is to combine theory and practice to collectively develop a critical methodology for "reparative practices" (Sedgwick) in response to the continuities of colonialism: with forced displacement, deportation of people, racism, violations of Indigenous rights, restitution and repatriation of cultural heritage, extraction, land-grabbing and destruction of biodiversity as some of the most tangible effects. A reparative practice can be understood as the processual and transformative labor to build small worlds of sustenance that cultivate a different present and future. In the seminars we will be exploring scholarships in the field of intersectional, Black, queer-feminist, Indigenous, and decolonial cultural studies as well as the work of artists, who work across disciplines and geographies to explore the material traces of colonialism and its reverberations today. By deploying situated, artistic strategies, that attune to the "lower frequencies" (Campt) and the willfully forgotten histories in the "cultural archive of colonialism" (Said, Wekker), the artists find new ways to reflect on and respond to the legacies of colonialism in the present. Students are invited to work collaboratively across the OSUN-network to develop their own work around a "repair case". The "repair case" should

respond to the students' own research interests and environments and will be presented as a creative output in form of a short performance, spoken words, sound-piece, photo-essay or video (or any other creative endeavour they see fit). No prior skills in art making are required and students will gain basic skills during seminars.

#### **Women Film Directors**

Sabine El Chamaa, Bard College Annandale

300-400 level- 3 US / 6 ECTS

4-week-course: June 13-July 8, 2022

Tuesdays and Thursdays, 16:30-19:30 Beirut Time, 09:30-12:30 New York Time, 15:30-18:30

Vienna Time

**Bishkek time:** Tuesdays and Thursdays, 19.30-22.00

AUCA equivalent: ID 4295, Gender: Media (JMC/ANTH/SOC/TCMA-419) in the TCMA

department

This course explores films directed by pioneering women from the 1900's to the present as sites of representation of gender politics. Students will acquire the analytical tools to read films as text through an interdisciplinary lens, drawing from readings in film theory, sociology, anthropology, queer studies, and post-colonial studies. The course questions whether female directorial authorship has a signature of its own, critically engaging with the power implications of the multiple forms of 'erasures' that women directors have endured (from their absence in film history books to their current ongoing underrepresentation in film festivals) while charting (past, present and potential future) resistance methods.

### **Academic Theme: Civic Engagement**

Women & The Pandemic: Activism, Leadership, & Global Equity Engagement

Cammie Jones, Bard College Annandale

200 level- 3 US / 6 ECTS

4-week-course: June 13 - July 8, 2022

Tuesdays and Thursdays, 08:30-10:30 and Fridays, 08:30-09:30 New York Time. Tuesdays and Thursdays, 14:30-16:30 and Fridays, 14:30-15:30 Vienna Time

Bishkek time: Tuesdays and Thursdays, 18:30-20:30 and Fridays, 18:30-19:30

### **AUCA equivalent:** Social Sciences requirement in General Education program

This summer course will examine the COVID-19 crisis effect on women and the historical, cultural, and social reasons why women, despite their majority in many other sectors of life, are greatly affected by such disparities. Students will explore how the impacts of the pandemic are felt differently depending on one's identity. Who has access--depending on class, race, and gender as well as age and ability--to care and who does not? Who is taking up the burdens of care and how is that form of leadership valued and supported? This seminar will provide students with the unique opportunity to bring theory and practice together in a very immediate sense by connecting with women and partner institutions throughout the global network to share their experiences during the pandemic and allowing students to submit a equity engagement project proposal with the goal of supporting women networks within their communities and/or networks front and center in the emergency responses now and post-pandemic.

#### **Academic Theme: Democratic Practice**

### **Contemporary Issues in Conflict and Security Studies**

Zulfiqar Amani, American University of Central Asia 200 level– 4 US / 8 ECTS

4-week-course: June 13 - July 8, 2022

Mondays, Tuesdays and Wednesdays, 20:00-22:30 Bishkek Time, 09:00-11:30 New York Time, 15:00-17:30 Vienna Time

**Bishkek time:** Mondays, Tuesdays and Wednesdays, 20:00-22:30

AUCA equivalent: Introduction to European Security ES 223,1 ID 3170 in European Studies

program

Credits: Only 6 ECTS credits will be transferred to AUCA

The course takes students through an advanced introduction of the theories and concepts of conflict and security. It explores the vast research archives, and gives students a sense of minor and major issues, terms and intellectual resources to make wars thinkable, to an extent measurable and, of course, to problematize it in various ways. The course will initially cover the concepts and vocabulary which makes the foundation of the inherited common sense or knowledge (realist and constructivist) of the conflict and security studies and will move forward to alternative conceptualization: feminist, critical theories, historical materialist thinking what these approaches tell us about major questions: such as the state as a major actor, how we understand security (inter)nationally, the need for the military, the technological peace, and what drives the policy debate of security.

#### **Introduction to Political Science**

Fahmida Rahman, BRAC University

200 level- 3 US / 6 ECTS

6-week-course: June 4 - July 22, 2022

Mondays and Wednesdays, 09:30-11:00 Dhaka Time, 23:30-01:00 New York Time, 05:30-07:00

Vienna Time

Bishkek time: Mondays and Wednesdays, 09:30-11:00

**AUCA equivalent:** Introduction to Political Science, ICP101.1, ID:5667 in ICP department

Credits: Only 6 ECTS credits will be transferred to AUCA

The course aims to introduce students to key concepts, approaches, and debates in political science by exploring some of the foundational and groundbreaking works in the discipline's subfields of political theory, comparative politics, and international relations. Connecting important works in the discipline with salient current events will enable students to engage in critical evaluation of political outcomes and explanatory narratives about politics.

## **Populism**

Levente Littvay, Central European University

300-400 level- 4 US / 8 ECTS

6-week-course: June 4 - July 22, 2022

Mondays, Tuesdays, Wednesdays and Thursdays, 15:00-16:30 Vienna Time, 09:00-10:30 New York Time

**Bishkek time:** Mondays, Tuesdays, Wednesdays and Thursdays, 19:00-20:30

**AUCA equivalent:** Democracy and Authoritarianism in Comparative Perspective, ICP-305,

ID:4818 in ICP department

Credits: Only 6 ECTS credits will be transferred to AUCA

According to the Varieties of Democracy (V-Dem) Institute's update of their global dataset on the state of democracy around the world for 2020, democracy is no longer the most prevalent form of government in the world. For the first time since 2001, the majority of the world's countries are autocratic. V-Dem reports that there are 92 autocracies, which comprise 54% of the global population. Only 46% of people live in the world's 87 electoral and liberal democracies. This trend is even more worrisome if we take into account that there has been an increase in autocratization in countries wielding significant economic and military capabilities, such as the United States of America, India, Brazil, and Turkey. Many of these trends are attributable to the

rise of populism. In this course we will explore what liberal democracy is and how populism presents itself as a challenge to its fundamental tenets while claiming to represent the people. What is at the foundation of this contradiction? We explore liberal democratic and populist literatures to find an answer. Further, course participants will dissect populism, explore how academics, journalists and politicians use the term, and attempt to bring clarity to what is essentially a conceptual mess. We highlight the value of such clarity for understanding and dig into the cutting edge research on the subject on countering the phenomenon's erosive impacts on democracy. The course is designed for online delivery. It includes interactive readings, pre-recorded lectures, predominantly conversations with leading experts on the subject (for an example, see <a href="https://youtu.be/1F3iEVLy8\_U">https://youtu.be/1F3iEVLy8\_U</a> or other conversations on the Team Populism YouTube channel), course activities (team work, content analysis of political speeches) and Zoom meetings. Course communication in between Zoom sessions will be facilitated by a chat platform (Slack or WhatsApp).

## Surveillance and Privacy: Legal, Moral, and Political Issues

Christof Royer, Central European University 100 level— 3 US / 6 ECTS

6-week-course: June 4 - July 22, 2022

Thursdays and Fridays, 14:00-15:00 Vienna Time, 08:00-09:00 New York Time

Bishkek time: Thursdays and Fridays, 18.00-20.00

AUCA equivalent: Social Sciences requirement in General Education program

The aims of this module are to introduce the issue of surveillance as an increasingly significant feature of contemporary societies and examine its evolution in both public and private domains. Course participants will be asked to critically analyze the ambiguous and multi-faceted character of surveillance, to consider the intellectual paths that lead us from more 'traditional' forms of state surveillance to a 'surveillance culture' and to investigate the international significance of 9/11 in relation to the use and legitimization of surveillance methods and technologies thereafter as part of the so-called war on terror. This course also aims to analyze the relationship between technological aspects of surveillance and the legal and political context in which they operate, in addition to the current and likely future public policy implications and challenges raised by surveillance.

**Academic Theme: Global Public Health** 

## Race, Health and Inequality: A Global Perspective

Dumaine Williams, Bard College Annandale 100 level— 4 US / 8 ECTS 4-week-course June 13 - July 8, 2022 Mondays through Fridays, 10:00-12:00 New York Time and 16:00-18:00 Vienna Time

Bishkek time: Mondays through Fridays, 20:00-22:00

### **AUCA equivalent:**

- 1. Multicultural Societies: Religious and Social conflicts in Europe, ES 301,1 ID 3175 in European Studies
- 2. Social Sciences/ Natural Science requirement in General Education program

Credits: Only 6 ECTS credits will be transferred to AUCA

The COVID-19 pandemic has put a spotlight on the fact that long-standing systemic health and social inequities have put many people from racial minority groups at increased risk of getting sick and dying from disease. This course will explore the causes and consequences of racial and ethnic health inequities and examine the history of how different countries have responded to these inequities. We will examine how racism, colonialism, segregation and globalization impact the health of incarcerated populations and the health of various immigrant groups. This course will also explore how various populations around the world respond and adapt to new outbreaks of disease and illness, along with the factors that limit the effectiveness of these responses. We will also look to the future and examine how community-based activism and large-scale social movements could move countries closer to achieving health equity.

#### **Special Topics: Contemporary Issues in Economic Policy**

Ceyhun Elgin, American University of Bulgaria

100 level- 3 US / 6 ECTS

6-week-course: June 4 - July 22, 2022

Mondays and Wednesdays-14:00-17:00 and Thursdays 14:00-15:30 Blagoevgrad Time Mondays and Wednesdays-07:00-10:00 and Thursdays 07:00-08:30 New York Time Mondays and Wednesdays-13:00-16:00 and Thursdays 13:00-14:30 Vienna Time

**Bishkek time:** Mondays and Wednesdays-17:00-20:00 and Thursdays 17:00-18:30

**AUCA equivalent:** To be confirmed

The course will introduce undergraduate students to surveys of contemporary policy issues in economic literature. Particularly, we will discuss recent policy issues arising through the COVID-19 Pandemic.

## **Academic Theme: Human Rights**

#### **Cyber Law**

Md Saimum Talukder, BRAC University

100 level– 3 US / 6 ECTS

6-week-course: June 4 - July 22, 2022

Mondays and Wednesdays, 17:00-18:30 Dhaka Time, 07:00-08:30 New York Time, 13:00-14:30

Vienna Time

**Bishkek time:** Mondays and Wednesdays, 17:00-18:30

**AUCA equivalent:** To be confirmed

The main focus of this course is to acquaint students with 'Information and Communications Technology (ICT) in the arena of Law.' The course is divided into several themes covering introductory concepts of cyberspace, digital rights and responsibilities, freedom of expression online, media freedom and right to information, misinformation and disinformation, infodemic, privacy and data protection, legal aspects of Big Data and Artificial Intelligence, cybercrimes and cyber security, transparency of mass surveillance, jurisdictional issues over the internet, e-governance, tech contracts, intellectual property rights over the internet and global internet governance. The course would also consider the possibilities for the use of ICT by lawyers and the impact of ICT on legal practice. The course will also briefly introduce students to the issues behind the concept of cyber law- a cross-disciplinary field that addresses the application of information technologies in the practice of law. Thus, students will be exposed to the contested narratives of the latest information and communication technologies that are used to enhance the functions of litigation and critical issues arising from their use.

#### **Global Policymaking**

Simon Bertrand, Ashesi University

200 level- 3 US / 6 ECTS

6-week-course: June 4 - July 22, 2022

Mondays and Wednesdays, 13:00-15:00 Accra Time, 09:00-11:00 New York Time, 15:00-17:00 Vienna Time and Fridays 13:00-14:00 Accra Time, 09:00-10:00 New York Time, 15:00-16:00

Vienna Time

**Bishkek time:** Mondays and Wednesdays, 19:00-21:00

Fridays 19:00-20:00

## **AUCA equivalent:**

- 1. Public Policy Analysis, ICP-260.1, ID: 3218 in European Studies program
- 2. Social Sciences requirement in General Education program

This course is an introduction to the study of global policymaking. It explores the main challenges of global governance – the design, adoption, and implementation of transnational policies. The first half of the course provides an overview and the theoretical tools to understand the process of global policy making. It discusses the main instruments by which global policies are enacted, examines the main actors involved in global policy making and their strategies, and develops a framework to assess the legitimacy and effectiveness of global public policies. The second half of the course explores global policy making through a range of case studies: 1) the regulation of the use of force in the international system; 2) global justice through the protection of refugees and the prevention of mass atrocities; 3) the management of international trade; 4) the financing of global policies; and 5) climate change and sustainability policies. Overall, the course aims to help students gain a critical understanding of the main challenges faced by the design, adoption, and implementation of global policies.

## Law, Human Rights and Justice: Anthropological Perspectives

Muhammad Raqib, BRAC University

300-400-3 US / 6 ECTS

6-week-course: June 4 - July 22, 2022

Mondays and Wednesdays, 15:30-16:50 Dhaka Time, 05:30-06:50 New York Time, 11:30-12:50

Vienna Time

**Bishkek time:** Mondays and Wednesdays, 15:30-16:50

**AUCA** equivalent: To be confirmed

This course introduces students to key anthropological debates and conceptual tools on law, human rights and justice. We will explore tensions between anthropological perspectives on rights and justice, which tend to value historical specificity, locality and complexity, and legal/human rights frameworks that seek recognition of 'universal' norms across contexts. We will begin with revisiting the historical opposition of the American Anthropological Association to the 1948 Universal Declaration of Human Rights (UDHR) and its more recent statement of support. The course will unpack the binary of culture versus rights and explore the reasons for the persistence of this opposition in popular media, policy recommendations and certain strands of feminist scholarship. In this context, we will ask what constitutes the human in human rights discourse. We will study how anthropologists -- from a variety of theoretical and ethnographic

perspectives – have moved beyond disabling debates on relativism versus universalism to explore instead how both "human" and "rights" are produced, mobilized and negotiated -- by nation states, transnational bodies and NGOs, and "local" activists.

#### **Academic Theme: Liberal Arts and Sciences**

### **Ethical Hacking**

Ala Abdulaziz, American University of Afghanistan

200 level- 3 US / 6 ECTS

6-week-course: June 4 - July 22, 2022

Sundays and Wednesdays - 17:00- 18:00 Kabul Time, 08:30- 09:30 New York Time, 14:30-

15:30 Vienna Time

Bishkek time: Sundays and Wednesdays - 18:30- 19:30

**AUCA equivalent:** To be confirmed

The approach of this course is practical and designed around a lab—a set of virtual machines with vulnerable applications—so students can safely try various pentesting techniques using publicly available tools. The students will be introduced to helpful tips and tricks, real-life scenarios and proven techniques from an experienced professional pentester.

### **Introduction to Blockchain and Cryptocurrencies**

Ala Abdulaziz, Haroun Rahimi, Pierre Rostan, American University of Afghanistan 200 level—3 US / 6 ECTS

4-week-course: June 13 - July 8, 2022

Mondays, Wednesdays and Fridays - 20:00-21:00 Kabul Time, 11:30-12:30 New York Time,

17:30-18:30 Vienna Time

Bishkek time: Mondays, Wednesdays and Fridays - 21:30-22:30

**AUCA** equivalent: To be confirmed

This course will introduce course participants to the fundamental building blocks of blockchain technology, as well as its application to cryptocurrencies. It will begin by investigating the fundamentals of money, banking, and payment systems, as well as relevant areas of computer science such as cryptography and distributed systems. It will dive into both blockchain and Bitcoin, as well as other decentralized platforms of money exchange. It will cover smart

contracts and tokens, and their most contemporary applications in the areas of stablecoins, central bank digital currencies and decentralized banking. The course will also cover the legality of cryptocurrencies, Digital Ownership Regulations, Energy Usage, Illicit Content Scammers, Money Laundering, and Exchange Frailty.

#### **Introduction to Public Opinion Research and Analysis**

Levente Littvay, Central European University

300-400 level- 4 US / 8 ECTS

6-week-course: June 4 - July 22, 2022

Days To be confirmed: 14:00-16:00 Vienna Time, 08:00-10:00 New York Time

**Bishkek time:** Days To be confirmed: 18:00-20:00

**AUCA equivalent:** To be confirmed

Credits: Only 6 ECTS credits will be transferred to AUCA

In today's world it is increasingly important but also difficult to get an unbiased view of what people are thinking. Certain communities express their opinion loudly, while others claim the appropriateness of action citing a silent majority. In this course we explore the difficulties of getting an unbiased view of society starting from who are the people surveys ask and reach, through how the questions are asked to the hands of analysis of public opinion data. In this course scholars will learn to be critical consumers of survey research. They will learn how to design questionnaires, how survey interviewees should talk to respondents and how data collection procedures are appropriately implemented. For analysis, course participants will utilize state of the art tools in the statistical programming language R. The course will also cover the basics of programming, data management and analysis. It includes interactive readings, pre-recorded lectures (mostly conversations with some of the world's leading public opinion researchers), self-guided activities (focusing on the basics of programming for survey data management and analysis) and Zoom meetings where the materials and assignments are discussed and augmented with group activities.

**Academic Theme: Sustainability and Climate** 

**Business Strategy for a Sustainable Future** 

Sayem Hossain, BRAC University 300-400 level– 4 US / 8 ECTS

6-week-course: June 4 - July 22, 2022

Tuesdays and Thursdays, 15:00-17:00 Dhaka Time, 05:00-07:00 New York Time, 11:00-13:00 Vienna Time

**Bishkek time:** Tuesdays and Thursdays, 15:00-17:00

**AUCA equivalent:** To be confirmed

Credits: Only 6 ECTS credits will be transferred to AUCA

The world today is grappling with numerous social, environmental and economical challenges. The Sustainable Development goals, while providing targets to tackle these immense challenges, have been difficult to achieve, lacking the necessary buy-in from global actors. Among the various constituents, businesses in particular can play a larger role in achieving the SDGs. This course aims to equip learners with the knowledge and practical strategies on the role of businesses in achieving the SDGs. The course covers both the theoretical and practical dimensions on how businesses can support SDGs. By looking into real-world examples, the course will educate the learners about the implications of SDGs in the business context. Analyzing various frameworks of sustainability (eg. TBL, GRE, CSR), the course will enhance awareness among future leaders who can catalyze a stronger and better business outcome that is not at odds with social responsibility.

## **Extractive Industries Law, Environmental Protection, and Sustainability**

Begaiym Esenkulova, American University of Central Asia

200 level- 3 US / 6 ECTS

6-week-course: June 4 - July 22, 2022

Days and Times: Mondays, Wednesdays, Fridays 16.00-18.20 Bishkek time

**Bishkek time:** Mondays, Wednesdays, Fridays 16.00-18.20

The extractive industries sector may have a significant sustainable development impact on natural resource-rich states. The development of this sector may bring about much-needed economic growth and reduce poverty. However, it does not automatically lead to states' sustainable economic, social, and environmental development. Extractive industries projects may fail to contribute to economic prosperity, may give rise to conflicts in local communities, and affect the natural environment negatively for years to come. Therefore, it is important to adopt prudent legal measures in order to ensure that this sector advances states' sustainable development and most importantly does not affect their ability to protect the environment. This course will focus on the comparative study of the legal framework of extractive industries and will concentrate on legal tools available for the advancement of sustainable development via the extractive industries sector. In particular, students will engage in the analysis of the national legislation of select natural resource-rich jurisdictions and global standards in the extractive sector as well as study a number of prominent extractive industries contracts. Course activities

will help students not only to apply the substantive knowledge gained in practice but will also help improve their proficiency in verbal and written communication as well as analytical and problem-solving skills.

### **GIS Applications in Earth Sciences**

Orunbaev Sagynbek, American University of Central Asia

100 level- 3 US / 6 ECTS

4-week-course: June 13 - July 8, 2022

Mondays and Fridays, 19:00-21:00 Bishkek Time, 09:00-11:00 New York Time, 15:00-17:00

Vienna Time

**Bishkek time:** Mondays and Fridays, 19:00-21:00

The course title is "GIS Applications in Earth Sciences". This course provides an opportunity for students to develop a solid understanding of basic theories and analytical methods in Geographic Information Science. Students are also expected to strengthen their GIS skills through hands-on labs, exercises, and course projects. Putting these two aspects together, students of this course should measure their accomplishments in terms of an overall growth and maturity in modeling/analytical skills and problem-solving abilities using GIS. Successful completion of this course should mean that you have become a qualified GIS user. The course focuses on GMT, also known as the Generic Mapping Tools software. GMT was invented by two LDEO graduate students in 1988, Paul Wessel and Walter H.F. Smith. GMT can do a wide range of functions, including reading and plotting data, but its most unique and powerful use today lies in its ability to create sophisticated map projections and visualizations. Since plotting data is now quite simple to do with MATLAB and Python, we will instead concentrate here on the versatile mapping functions available in GMT.

------