NOTE ON INTERSESSION COSTS:
Fee waivers and/or reduction in costs for sessions may be available to students who are eligible for financial aid. All Tier 1 students automatically qualify for a fee waiver for on campus sessions. Students with demonstrated need (those paying a reduced IMSA student fee or otherwise affected by extenuating circumstances as determined by the Principal) may be eligible for aid to offset intersession costs. If you feel you qualify, please e-mail prinoffc@imsa.edu. Keep in mind, only one scholarship per student will be awarded over the three-year period for an out-of-state trip.

CLOSED SESSIONS are not open for enrollment at this time. These sessions were previously offered to eligible students (e.g. some sessions were restricted due to stated prerequisites). Students participating in a CLOSED SESSION do not need to complete the online registration form.

The following intersession experience on math support will be required for some students. Students will be notified of required participation prior to intersession week. This experience will not be listed as a choice for students on the intersession request form, but is offered in the catalog for informational purposes only.

Math Support – CLOSED SESSION

Part Time Morning 8:30 am -11:30 am Mon-Fri

This session is designed to help students identify factors that are impeding their mathematical success. We will work to identify and support areas of weakness (Mathematical content needs will be individually assessed and addressed), provide opportunities for students to have fun in math, and help students formulate a written plan of study habits and strategies that can be monitored for effectiveness in the upcoming semester/course.

Prerequisites: Any student who earned a C- or D in Geometry, MI1/2, MI2, MI3, or a D in MI4 • Any student who earned a C in these courses will be evaluated case-by-case for possible requirement to take this intersession.

Cost: None

Janice Krouse  Current Faculty krouse@imsa.edu
FULL-TIME SESSIONS  Full Time 8:30 am -11:30 am AND 1:00 pm - 4:00 pm Mon,Tues, Wed,Fri AND 1:00 pm – 9:30 pm Thurs

The Art Institute of Chicago: Moments of Light

Full Time 8:30 am -11:30 am AND 1:00 pm - 4:00 pm Mon,Tues, Wed, Fri AND 1:00 pm – 9:30 pm Thurs

A richly dressed young woman stares directly at the viewer, her eyes full of emotion and mystery. Is she serene ... sad ... seductive? Why has the artist chosen to portray her is such a manner? More importantly, what assumptions can we make about the culture that lies behind the work, and its attitudes towards humanity, individuality, or femininity? A work of art serves as an expression of the cultural values from which it springs; it embodies particular views of beauty, power, morality, and sexuality. It also exists in several other dimensions: the dominant systems of thought that shape it, the other works of art that influence its creation, the intentions and inner struggles of the artist, and the assumptions of those who experience it. In this intersession, we will look at five individual works of art in the collections of the Art Institute of Chicago in all their complexity, one on each day of the course. We will explore the varied factors that influenced each work; we will trace the changing definitions of the beautiful, the sacred, and the sensual; and we will study the way that works of art reflect the experiences and struggles of individual artists. We will divide our time between classroom work on IMSA’s campus and visits to the Art Institute. We will take two trips to the Art Institute to experience the works we study, and we will also tour much of the museum at those times.

Prerequisites: Juniors and Seniors only

Cost: None

Robert Kiely  Current Faculty oldstuff@imsa.edu

FULL-TIME SESSIONS  Full Time 8:30 am -11:30 am AND 1:00 pm - 4:00 pm Mon-Fri

eleMENT Intersession Program

Full Time 8:30 am -11:30 am AND 1:00 pm - 4:00 pm Mon-Fri

eleMENT is a student-led entrepreneurship program designed to introduce students to concepts in entrepreneurship. We will travel to 1871 in Chicago on three separate days during intersession and engage in hands-on activities to learn about the build-measure-learn cycle. Students will learn about the BML cycle, spend time participating in group discussions, networking with entrepreneurs in 1871, and participate in a design sprint on the last day.

Prerequisites: None

Cost: None

Hunter Welch  Current Student
Madison Mazzorana  Current Student
Kelly Page  Current Staff kpage@imsa.edu
Gastronomy

Full Time 8:30 am - 11:30 am AND 1:00 pm - 4:00 pm Mon-Fri

Gastronomy is a five-day food science program that pulls together the connections between culinary arts and STEM. With a culinary arts lesson taught in the first half of the day, and the STEM application taught in the second, students are given a hands-on approach to learning not only about food and how to make it, but also how what they’re learning in their math and science classes can be directly applied to the food they eat. Through this program students are taught STEM education in a creative, interactive, and hands-on environment – not to mention there will be a different menu item students will be cooking and/or baking each day! At the end of the program, students’ views on STEM applications/fields will be broadened, and they will leave with skills that can help them in everyday life.

Prerequisites: None

Cost: $75

LaDonna Hawthorne  Current Staff lhawthorne@imsa.edu

How Stuff is Made: Tours of Local Manufacturers

Full Time 8:30 am - 11:30 am AND 1:00 pm - 4:00 pm Mon-Fri

Do you want to see stuff get made? Put on your work boots and get ready to go behind the production line. We will visit 9 local manufacturers. We will meet owners, superintendents, engineers, machinists, mechanics, and specialists in multiple fields. Learn about how you can put your interest in engineering to work.

Prerequisites: None

Cost: None

Devon Madon  Current Faculty dmadon@imsa.edu

IMSA-PTHS Student Exchange – CLOSED SESSION

Full Time 8:30 am - 11:30 am AND 1:00 pm - 4:00 pm Mon-Fri

IMSA students of Russian will travel to St. Petersburg, Russia for two weeks (March 16-31), live with host families, attend classes at PTHS (Physical-Technical High School), and engage in a cultural program in and around St. Petersburg. IMSA participants will attend full-time orientation sessions during Intersession week in January.

Prerequisites: Current enrollment in Russian 2 or Russian 3. Strong academic record in Russian and all other classes. Exemplary IMSA discipline record. Willingness/ability to host a Russian student for home stay in 2020. Priority will be given to students who hosted PTHS students in 2018.

Cost: IMSA students will pay no more than $2,300 to travel to St. Petersburg. This amount includes airfare, visas, travel insurance, occasional meals, room and board, and a cultural program.

Paavo Husen  Current Faculty paavo@imsa.edu
**Machine Learning using Scikit and TensorFlow**

Full Time 8:30 am -11:30 am AND 1:00 pm - 4:00 pm Mon-Fri

This session covers the basics: function approximation with machine learning, image classification, and finally machine learning history and its implications in society.

**Prerequisites:** Completion of Object Oriented Programming and MI-4

**Cost:** None

Tom Meyer  Current Faculty tmeyer@imsa.edu

**Shine the Spotlight: IMSA MovieMakers**

Full Time 8:30 am -11:30 am AND 1:00 pm - 4:00 pm Mon-Fri

Have you ever wanted to have your idea broadcasted in a film? How about being a star in a short movie? Well, here’s your chance. In this intersession, students will learn the basics in video/cinematography and gain an understanding of what it takes to create a short 8-10-minute clip. We will cover how to use the different cameras and provide a basic tutorial on how to use Adobe Premiere to edit videos. Additionally, we may also provide information on how to create different special effects. After learning the basic setup, students will be split into smaller groups of editors, videographers, storyboard writers, and actors depending on their preferences. Throughout the course of the week, each group will work together to create a film or trailer of their choosing to showcase as a finished product.

**Prerequisites:** No prerequisites are required except for any ideas you may have for an upcoming movie trailer or short film. Suggestions/proposals are welcomed!

**Cost:** None

Dwanne Colobong  Current Student

William McGrail  Current Staff wmcgl@imsa.edu

**Sovereign of the Seas**

Full Time 8:30 am -11:30 am AND 1:00 pm - 4:00 pm Mon-Fri

Using films, readings, and, simulations, this intersession examines the struggle for the world's oceans.

**Prerequisites:** None

**Cost:** $6.00 ticket for entry to see U505 submarine exhibit at the Museum of Science and Industry

Claiborne Skinner  Current Faculty skinner@imsa.edu
Titan Robotics FRC: Designing and Building a Competitive Robot

Full Time 8:30 am -11:30 am AND 1:00 pm - 4:00 pm Mon-Fri

The FIRST Robotics Competition (FRC) is an annual international competition where IMSA partners with mentors to design, build, and program a robot for the competition. Intersession week is the first week after the challenge is announced and an ideal time to design and begin building the robot. In the intersession, students will strategically analyze the competition to distill optimal design concepts. Utilizing these concepts, they will collaboratively design, draft, and prototype multiple robots and components in the search for an optimal design. In order to participate in the build season, you must be a part of this full-day intersession.

**Prerequisites:** Must be a fully trained team member of Titan Robotics FRC by the time of the intersession.

**Cost:** None

Dane Christianson Current Staff & Alumni Class of 2011 dchristianson@imsa.edu
Amy Neidlein Current Parent

PART-TIME MORNING SESSIONS  Part Time Morning 8:30 am -11:30 am Mon-Fri

Advanced Topics for Arduino

Part Time Morning 8:30 am -11:30 am Mon-Fri

This course will go beyond the basics of Arduino and will extend its capabilities by introducing new hardware and libraries.

**Prerequisites:** CS315/SCI315 or similar experience programming Arduino for advanced OR interest for the novice

**Cost:** None

Jonathan D. Wilson  Alumni Class of 1996 jwilson@gmail.com
Pat Patankar  Current Faculty ppatankar@imsa.edu
Mark Carlson  Current Faculty mcarlson@imsa.edu

Aesthetic Lighting in Photography

Part Time Morning 8:30 am -11:30 am Mon-Fri

Photography isn't just simply capturing a moment, it's about creating a moment to tell a story without words. Interested in learning the artistic capabilities of studio photography, or simply looking for some cool Instagram photos? You've found the right intersession! In this intersession you will learn skills to utilize to evoke the creative scenario for an image that you picture in your mind. We will cover how to use artificial lighting, shadows, and orientation to convey messages and emotion from a subject. Also, we will teach how to use cover paints and gels to put flare and add pops of color to your photos in studio. After learning the art of setting up and capturing these photos, we will train you how to put a
professional edge and clean up photos using Adobe Lightroom and Photoshop. At the end of the week, we will print out 2 of your best photos, and have the opportunity to show them in the IRC Art Expo.

**Prerequisite:** None, if you want feel free to do some personal research online beforehand or bring your prior knowledge and experience.

**Cost:** None

Samantha Senko  Current Student  
Rakesh Chatrath   Alumni Class of 2016  
Kevin Broy  Current Staff  kbroy@imsa.edu

**African American Achievements in STEM**

Part Time Morning 8:30 am -11:30 am Mon-Fri

It is IMSA’s priority to advance equity in STEM education and representation by integrating Cultural Competence, Diversity, Equity, Equity-Minded Frame, Excellence and Inclusion into every facet of the Academy. Despite underrepresentation in STEM disciplines in relation to their proportion in the total population, African-American innovators have made important discoveries that have defined different STEM fields. The intersession will allow students to become aware of the African-American achievements in STEM fields and familiarize themselves with the factors that impact the African-American community. During the intersession, students will have the opportunity to examine issues faced by members of the African-American community in their pursuit to succeed in STEM careers, learn about the important achievements of African Americans in STEM, brainstorm how we as an Academy can incorporate these achievements into our culturally responsive curriculum and create a plan of actions/proposal that would be presented to IMSA’s stakeholders.

**Prerequisites:** None

**Cost:** None

Valentina Sorescu  Current Faculty  vsorescu@imsa.edu

**Allies 101: Putting the FUN in FUNshop!**

Part Time Morning 8:30 am -11:30 am Mon-Fri

Are you an enthusiastic lover of STEM? Do you prefer to lead, rather than follow? Do you love learning and kids? Or maybe you've wanted to join Allies (a STEM leadership development group at IMSA) for a while, but your schedule just won't allow it? Then this just might be the intersession for you! Participants will take a deep dive into inquiry, instruction methods, and classroom management during this half-day course. By the end of the week, all participants will be ready to teach a circuits-themed Funshop for students in grades 3-6! (Please note, by signing up for this intersession, you are also committing to teaching or group leading at an actual Funshop on Friday, January 25th, from approximately 4:30 - 9:00. Service hours will be awarded for this!)

**Prerequisites:** None

**Cost:** None

Megan Scherer  Current Staff  mscherer@imsa.edu
Balsa Bridge Design, Building, and Testing

Part Time Morning 8:30 am -11:30 am Mon-Fri

Students will learn basic design principles and will design, build, and test their bridges. On day one, students will design their bridge. They will then spend days 2-4 building their bridge. On day 5 bridges will be evaluated in two categories: aesthetics and efficiency (strength). Students who do not want to test their bridge on day 5 may choose to do so and keep their bridge (testing the bridge involves applying weight until the bridge breaks).

Prerequisites: None

Cost: None

A Beginners Guide to Unity and Video Game Design

Part Time Morning 8:30 am -11:30 am Mon-Fri

Video games have continued to grow as an important part of pop culture, drawing many to the field due to the creativity and freedom the medium allows. This intersession will explore some of the basic principles of video design, discussing traits that lead to fun, compelling, and successful games. We will look into various career opportunities in the industry, as well as the broader and often ignored impact video games can have as art and a tool to advance the human condition. Finally, the intersession will include instruction on creating a simple game using Unity, a free and powerful cross-platform game engine. Students will be able to test game Demos, while learning to create their own throughout the week.

Prerequisites: Laptop with Unity installed. (Program is free to download and use.)

Cost: None

Carpentry 101

Part Time Morning 8:30 am -11:30 am Mon-Fri

Have you ever cut a piece of wood? or Do you want to explore more wood fabrication? If so, join us at the Grainger Makers Lab. Students will learn how to design, create, operate machinery, and assemble wood structures. The main goal of this class is to introduce students to the equipment and materials necessary to create simple items such as picture frames, bookshelves, desk organizers, or decorations.

Prerequisites: None

Cost: None
Chinese Art Therapy

Part Time Morning 8:30 am -11:30 am Mon-Fri

Art therapy has been widely practiced both formally in a therapeutic context and informally among those who simply feel better when they draw. This intersession course will help students relieve their anxiety and stress and lift their mood by learning about the fundamentals of Chinese paper cutting art, Ink Painting and Chinese Knots. Students will learn how to create 2D and 3D art pieces for both interior decorating and important events in life, in the rhythm of therapeutic music. The class will also visit local Chinese communities to experience authentic Chinese therapies in daily life. Students will gain knowledge of Chinese art therapy while developing cultural competency through comparing and contrasting US and Chinese cultures in depth.

Prerequisites: None

Cost: None

Christine Zhang  Current Faculty czhang1@imsa.edu

A Communication Course for People Who Fear Public Speaking

Part Time Morning 8:30 am -11:30 am Mon-Fri

This intersession is designed to enhance oral communication skills of students through discussion and application of theories of communication. If you are the student who hesitates to speak up in class, fears interviews, would rather die than give a speech, or just want to improve your public speaking skills, this is the class for you. While this intersession will not promise to cure your fears, it will give you tools to help manage them and provide you with an opportunity to practice your communication skills in a safe place.

Prerequisites: None

Cost: None

Michelle Rogers  Alumni Class of 2006 michellearogers@gmail.com

Creative Comics Studio

Part Time Morning 8:30 am -11:30 am Mon-Fri

Comics have been a popular form of communication since the proliferation of newsprint of the late 19th century, and current comics have continued that trend in finding eager new readers in the 21st century. This intersession aims to introduce students to the world of digital and print comics and to instruct them in the production and potential publication of their own original work. Any experience level is welcome; however, students with any prior experience illustrating or creating comic projects are especially encouraged.
**Prerequisites:** No prerequisites, but students that have taken Graphic Novels or intend to take the course will likely get more out of the intersession. Students who have had some experience drawing and who have an interest in creating their own comics will get the most.

**Cost:** No extra cost, though students will need to provide their own art supplies.

**Mike Dean  Current Faculty**  mdean@imsa.edu

**Introduction to Cybersecurity**

Part Time Morning 8:30 am - 11:30 am Mon-Fri

Michael Atkinson, Principal Systems Engineer for the cybersecurity company FireEye and an industry veteran, will discuss issues around the cybersecurity industry, including threat actors, malware, vulnerabilities, exploits, encryption, threat intelligence, authentication, authorization, accounting, the Internet of Things, legal issues, social media, threats to elections, careers, and more. This class will consist of presentation, discussion, and small group projects. There will not be any hands-on use of hacking tools.

**Prerequisites:** An open mind.

**Cost:** None

**Michael Atkinson  Current Parent**  mike.atkinson@gmail.com
**Namrata Pandya  Current Faculty**  npandya@imsa.edu

**Drug Discovery SIR**

Part Time Morning 8:30 am - 11:30 am Mon-Fri

Our Drug Discovery research group’s goal is to design unique compounds that have the capacity to combat diseases for a wide range of disorders. Drug discovery is the process through which potential new medicines are identified. It involves a wide range of scientific disciplines, including biology, chemistry and pharmacology. Our group has collaborations with the pharmaceutical industry and academics institutions.

**Prerequisites:** Must be enrolled in the Drug Discovery SIR group for the 2018-2019 school year.

**Cost:** None

**John Thurmond  Current Faculty**  jthurmond@imsa.edu
**Angela Ahrendt  Current Faculty**  aahrendt@imsa.edu

**Kerbal Space Program**

Part Time Morning 8:30 am - 11:30 am Mon-Fri

We will use Kerbal Space Program to explore elements of aerospace engineering, orbital mechanics, and space exploration.
Leisure Reading

Part Time Morning 8:30 am -11:30 am Mon-Fri

Despite its casual-seeming name, leisure reading is a valuable skill that can benefit you throughout your personal and professional life. Research shows that leisure reading – defined as “independent, self-selected reading of a continuous text for a wide range of personal and social purposes” – enhances your reading comprehension ability, development of vocabulary, general knowledge, and empathy for others.

In one study, American students who frequently engaged in reading for pleasure scored higher in reading than peers who did not. When struggling readers engage in leisure reading and receive support for selecting books, time to read outside of school, and opportunities to discuss books, they make gains in reading achievement*. Leisure reading is also good for your mental health – a British study in 2009 found that leisure reading can reduce stress by up to 68%. **

In this intersession you and your classmates will become a culture of readers. Led and facilitated by Dr. Kotlarczyk, you will discuss the research on leisure reading and compare it to your own experience. We will spend the first fifteen minutes of every session in the IRC. You may select your reading material there or bring your own – fiction, non-fiction, graphic novels, poetry, anything. The only requirements are (1) it cannot be reading for a class or test, and (2) absolutely no screens (phones, computers, kindles, etc.) will be allowed at any time.

Then you will read.

In the last portion of each meeting, we will devote time to considering our experience reading – and its effect on stress level and mental health – in the context of the research. Students will be asked in this time to maintain a reading journal and to share their reflections. They will also be encouraged to develop a plan that will enable them to continue to hone their ability in the new school year and beyond, helping to cultivate the practice of leisure reading into a lifelong habit.

* All research from the description is cited in “Leisure Reading” position statement by the National Council of Teachers of English, the Canadian Children’s Book Centre, and the International Reading Association (2014).

** Cited on the University of Minnesota website “Reading for Stress Relief”

Prerequisites: None

Cost: None
Mental Health: Social Factors, Stigma, and How We Can Tackle It

Part Time Morning 8:30 am -11:30 am Mon-Fri

Mental health issues have become particularly pervasive among youth populations in recent years, but the associated stigma often prevents a very necessary dialogue about how communities can tackle these issues and offer assistance. This intersession aims to explore various facets of mental health about how it both develops and is perceived in communities similar to IMSA. We will spend the first half discussing the social and systemic factors that affect mental health and the second half guiding students through creating and implementing their own initiatives to improve mental health at IMSA. While we will talk about general trends and concepts in the mental health space, we will try to specifically frame them in relation to IMSA. This intersession is designed for those interested in understanding how they can impact and improve mental health at IMSA and on a societal level. *Note: while the instructors are happy to discuss current issues at IMSA, this course is not designed to provide therapeutic or psychological services for students.

Prerequisites: None, anyone with an interest in mental health may take this intersession.

Cost: None

Shelly Teng Alumni Class of 2015 tengs@seas.upenn.edu
Eveline Liu Alumni Class of 2015 eveline_liu@brown.edu
Robert Hernandez Current Staff hernandi@imsa.edu

Music Composition

Part Time Morning 8:30 am -11:30 am Mon-Fri

Budding composers will explore the craft of composition by writing their own pieces. Instruction in the class will emphasize the use of music theory to implement musical ideas, drawing on examples from a variety of genres, with particular emphasis on the interplay of harmony and counterpoint. Students will experience the entire compositional process, from initial sketches to performance, and will receive a recording of the class’ compositions. Compositions can be written in any musical style and for any instrumentation.

Prerequisites: Students must have basic proficiency in an instrument (which may be voice) and should have knowledge of simple music theory, such as key signatures and scales.

Cost: None

Peter Dong Current Faculty pdong@imsa.edu
**NAVAC Build & Research**

Part Time Morning 8:30 am -11:30 am Mon-Fri

The mission: returning sailing to paralysis subjects.
The NAVAC [Neuroprosthetic Assistants for Veterans & Civilians] Team will be leading a productive week-long work session for conducting research in the field of neuroprosthetics and assistants for disabled persons. We will, using the resources we’ve compiled over the previous months, work on mechanically and digitally ‘building’ a nautical aid for our current disabled subject, Mr. Heronemus.

**Prerequisites:** Some experience in any kind of coding or research conducting, otherwise experience in mechanical or electrical building (like Robotics).

**Cost:** None

Erik Swanson  Current Staff  eswanson@imsa.edu

**Nuclear Weapons and other WMDs**

Part Time Morning 8:30 am -11:30 am Mon-Fri

Offered every other year. Students will learn some of the physics and material science behind nuclear weapons, their destructive effects, which countries possess them, how to defend against them, and what other Weapons of Mass Destruction exist (not Zombies, sorry.) Through lectures, films, discussions, and presentations, we'll explore the both the mechanics behind and societal impact of having our collective finger on the button. NEW THIS YEAR: Broken treaties bring us closer to a nuclear conflict!

**Prerequisites:** None

**Cost:** None

Eric Engelhard  Alumni Class of 1996  caliban1717@gmail.com

**Resuscitation Science and American Red Cross First Aid, CPR, & AED Certification**

Part Time Morning 8:30 am -11:30 am Mon-Fri

This intersession is a first aid and cardiopulmonary resuscitation (CPR) training program to prepare individuals to respond to injuries and sudden illnesses that may arise and also to assist in their understanding of the physiology behind CPR. This program will give individuals the knowledge and skills necessary to prevent, recognize and provide basic care for breathing emergencies and cardiac emergencies in infants, and perform cardiopulmonary resuscitation (CPR) and use an automated external defibrillator (AED) for children and adults of sudden cardiac arrest until advanced medical personnel arrive and take over.

**Prerequisites:** None
Cost: $45 per student, fees cover certification and supplies

David Lundgren  Current Faculty dlundgren@imsa.edu
Mary Myers  Current Faculty mmyers@imsa.edu
Sowmya Anjur  Current Faculty sanjur@imsa.edu

Science Ruins Everything

Part Time Morning 8:30 am -11:30 am Mon-Fri

Modeled after shows like the popular YouTube series “Adam Ruins Everything” and Netflix’s “Explained”, in this intersession students will choose a topic of interest and dive into the “reality” of the subject as explained through science. They will use their research to produce episodes of their very own IMSA web series “Science Ruins Everything”.

Prerequisites: None

Cost: None

Sarah O’Leary-Driscoll  Current Faculty soleary@imsa.edu
Crystal Randall  Current Faculty crandall@imsa.edu

Trick Taking Card Games 2.0

Part Time Morning 8:30 am -11:30 am Mon-Fri

We will learn and play spades, sets (fish), and poker. Spades and sets are team games while poker is individual. All three though require strategical and logical thinking. Students will be active in learning, then playing the games. We will discuss and employ strategies specific to these specific games, but are common to many games. Students will learn about trumps, finesse, leads, signaling to partner, card counting, cross rough, and other ideas.

Prerequisites: Previous card game experience

Cost: None

Hannah Grauer  Current IMSA Student
Matthew Selvaraj  Current IMSA Student
Devika Prasad  Current IMSA Student
Steve Condie  Alumni Faculty

Who Wants to be a Millionaire

Part Time Morning 8:30 am -11:30 am Mon-Fri

As a parent of two young adult children, I have spent over 40 years saving and investing money for their development, our retirement, and the future well being of our family. Young people today have a great asset on their side—that is TIME!
Planning and making sound financial decisions over an extended period of time can make for a comfortable stress free lifestyle. During this intersession we will touch on the basics of saving, investing, compounding, stocks, bonds, retirement account options, use of credit, mortgage application, and much, much more. I will be presenting a number of basic concepts in these areas with actual examples. Furthermore I have partnered with brokerage and banking representatives who will be providing presentations in their respective areas. Finally I will be giving out some investment and credit information for the students to present back their plan on how they would manage these investment and credit situations and their reasons why.

**Prerequisites:** Willingness to learn and intrigue to ask questions on the topics presented

**Cost:** None

John Wood  Outside Presenter  john_w_60187@yahoo.com  
TBD IMSA Sponsor  Current Faculty/Staff

**Wire Sculpture**

Part Time Morning 8:30 am -11:30 am Mon-Fri

Learn to design, plan and create wire sculptures using techniques dating back thousands of years. Students will learn basic techniques in wire forming including bending, wrapping, drawing and hammering. Students will also be introduced to the theory of metallic structures and the effects that cold working has on their properties.

**Prerequisites:** None

Cost: $20 for wire

Sam Kaufman  Alumni Class of 2013  samkaufman01@gmail.com  
Alice Kaufman  Alumni Parent  alicekaufman@mkbrody.com  
Joyce Symoniak  Current Faculty  jsymoniak@imsa.edu

**PART-TIME AFTERNOON SESSIONS** Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

**Apocalypse: Learning History Through Stories of the End**

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

In this intersession, we will see what we can learn about different places and times in history by examining the apocalypse stories they tell. We will watch two apocalyptic films, one of which will relate to the Cold War and one which will be more modern. Students will be required to read H.G. Wells' *The Time Machine*, as we will discuss that within the context of the Industrial Revolution. Another session will involve tabletop gaming about the apocalypse, in which we will play some games and then examine concern with scarcity and globalization in our own popular culture. Finally, we will do a real-time investigation into modern doomsaying and prepper culture in America and apply what we have learned about this category of analysis to ourselves. Student will present their findings in this last session to the group. Students will need to bring a computer to the last session, as we will be doing work online.
**Prerequisites:** Students will be required to read H.G. Wells’ *The Time Machine* prior to the session.

**Cost:** Students will be responsible for obtaining a copy of H.G. Wells’ *The Time Machine* (used cost about $1 plus shipping on Amazon).

Sheila Wille  Current Faculty  swille@imsa.edu

"A to Polska właśnie..." Exploring Polish Language and Culture

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

This intersession will introduce students to language and culture of Poland. Participants will learn basics of Polish with an emphasis on speaking and communication. They will explore different aspects of Polish culture and Polish contributions to science, literature, modern society and entrepreneurship. They will also learn one of the Polish national dances! Do you want to discover “the hardest language to learn in the world”? Do you want to explore Polish impact on history from 966 to bringing down the Communism to giving the world a disproportional number of Nobel Prize winners? Do you want to explore your ethnic roots? Get past the crazy grammar and discover the language that is “amazingly different,” the country that is “one of the most dynamic economies of EU”, the nation that has seen “the emergence of an entrepreneurial generation.” Discover for yourself the German-Polish Miracle, the political engagement of Polish youth and Polish Hip-Hop as the “Voice of New Others.”

**Prerequisites:** None

**Cost:** None

Agnieszka Michalak  Current Faculty  amichal@imsa.edu

At the Founding: Readings in the Federalist and Anti-Federalist Papers

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

In the period immediately between the writing of the US Constitution and voting for its approval (1787-1788), a lively and intellectually dynamic debate occurred. The power and depth of this engagement, as seen in the writings of James Madison, Alexander Hamilton, George Mason, etc.) has never been repeated in American history. As a result, politicians, academics and citizens still return to the several dozen documents to support their arguments to this day. This intersession will require students to read a sampling of both the Federalist and Anti-Federalist Papers outside class (provided). Class time will be dedicated to a discussion of the meaning and the success or failure of the documents, where they show up in the Constitution, and what they might mean for the present. Be aware, this intersession will require work by way of reading and discussion.

**Prerequisites:** None

**Cost:** None

Lee Eysturlid  Current Faculty  leysturl@imsa.edu

The Bible in the Twenty-First Century

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri
The Bible is perhaps the most influential piece of literature in the history of Western civilization, and remains a potent force today in society, philosophy, and politics. At the same time, while three-quarters of Americans identify as Christians, more than half have never actually read more than a passage or two of the Bible. This class will examine the text of the Bible with a view toward understanding its role in contemporary society. We will examine timeless issues such as creation, salvation, and evil as well as more modern issues such as the role of women, the abolition of slavery, and the place of homosexuality.

**Prerequisites:** Students of any religious (or non-religious) background are welcome.

**Cost:** None

Peter Dong  Current Faculty  pdong@imsa.edu

**Ethical Machine Learning**

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

All algorithms have biases, all systems have limitations, and all technologies have risks. Machine learning techniques offer the potential to produce faster, cheaper, and more consistent results, but these approaches can easily be misused. In Ethical Machine Learning, you will reflect and grow as a leader in the face of challenges with messy social and technical implications. On each day, students will investigate a situation, apply a new machine learning technique, and evaluate available insights to make recommendations. The programming component of this class focuses on analyzing and modifying models, not writing lots of code.

**Prerequisites:** Completed CSI or other experience programming in Python.

**Cost:** None

Vinesh Kannan Alumni Class of 2015  v@hawk.iit.edu
TBD IMSA Sponsor  Current Faculty/Staff

**Exploring and Colonizing Our Solar System**

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

In the words of Carl Sagan, “Exploration is in our nature. We began as wanderers, and we are wanderers still. We have lingered long enough on the shores of the cosmic ocean. We are ready at last to set sail for the stars.” Human beings have never been satisfied with sedentary life. Exploring is deeply ingrained in who we are as a species, and our current technology gives us the unique opportunity to venture off of our home planet to colonize new, exciting worlds. In this course you will learn about the solar system, how we can explore and colonize it, and why we should consider doing any of this when we have so many problems to solve here on Earth.

**Prerequisites:** None

**Cost:** None

Steven Kosvick Alumni Class of 2014  skosvick@gmail.com
TBD IMSA Sponsor  Current Faculty/Staff
**Flow into 2019: How to Biohack Your Life**

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

Come hit the mat to enter on a transformational journey and re-attune your body, mind and spirit to bring out the best in you for the upcoming year. During the week, we will be getting down on our yoga mats, moving limbs that we did not know we could stretch, focusing our minds inward through mindfulness and meditation exercises, and journaling to release mental tension and to reframe relationships in our lives. Do you want to discover how to biohack your life based on the foods you eat, the routines you engage in, and the mindset you carry with you? Do you seek to start out the New Year with intention to improve your physical and mental presence? Are you interested in developing techniques to reduce strain on your eyes and in your muscles? We will explore all of this and more. Join for a unique week of inner flow, movement, breathing, and reflection that will help propel you forward to reconnect with yourself and re-set your purpose in school and the years ahead.

**Prerequisites:** An open mind and a willingness to take a risk on yourself

**Cost:** Please bring your own yoga mat.

*Arati Shroff Alumni Class of 1998 arati.shroff@gmail.com*
*TBD IMSA Sponsor  Current Faculty/Staff*

**The Forensic Case of the Sick Alien from Plymyss**

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

Individual Belldoor Zip Martin, the first alien visitor to planet Earth, is sick and world leaders need to know what to do to help. Working in teams, you will analyze secretions gathered by medical personnel attending to Ind. Martin using an infrared (IR) spectrometer. Comparing these IR spectra to molecular modeling calculation predictions will lead to a complete structural and chemical evaluation of the evidence. The goal is to crack the case with this information and to publicly propose a solution that allows the citizens of Plymyss to visit Earth safely.

**Prerequisites:** SI Chemistry. A Mac or Win laptop with 2 GB RAM and 1 GB free disk space

**Cost:** $0

*Joe Golab  Current Faculty jgolab@imsa.edu*

**The Great IMSA Escape**

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

Do you like creating and solving puzzles? In this intersession we will create our own escape room challenge – the Great IMSA Escape of 2019! We will start off the week testing our skills at an escape room, then work on creating puzzles, riddles, and challenges to put into our own escape room design. By the end of the week we will invite the IMSA community to see if they have what it takes to get out!

**Prerequisites:** None
Cost: approximately $25/student to cover cost of escape room field trip

Laura Kopff  Current Faculty lkopff@imsa.edu

**Happiness: Your Path to Success in Health, Relationships and Work**

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

A common myth is that we will find happiness when we meet with success – when we find the perfect job, when we find the perfect partner or when we get the perfect body. Recent research in the positive psychology or the “Science of Happiness” shows that the reverse is true. Happier people are more likely to be successful in work, relationships and attain good health. The good news is that we can train our mind to be happier, more engaged, creative, motivated, energetic, resilient, and productive at work. It is not about having a silly grin on your face all day (that does help!) but developing a happier and more positive mind-set to achieve the extraordinary in our work and in our lives.

**Prerequisites:** None

Cost: $35 for CD/digital audio files and work book

Sudesh Kannan IMSA Alumni Parent sudesh@meditation-magic.com

**Harry Potter and the Anti-Fascist Resistance: The Absolutely True Origins of the Order of the Phoenix**

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

Join Dr. Smith and Ms. Townsend for a week-long discussion of J.K. Rowling’s historical source material and the methodology of literary world building. Our travels will take us through Spain, Germany, France, and the UK with a high probability of encountering fantastic beasts. Muggles always welcome!

**Prerequisites:** None

Cost: None

Eric Smith  Current Faculty esmith@imsa.edu
Tracy Townsend  Current Faculty ttownse@imsa.edu

**High Schoolers of the Vast Wasteland**

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

If the world of television is a “vast wasteland,” as Newton Minow once claimed, it is a land nevertheless populated by an unusual number of high schools and high schoolers. In this intersession, we’ll get to know a number of them as we see our own high-school experiences reflected on screen and dip our toes into the growing field of Television Studies. We’ll follow real-life high schoolers in the Chicago suburbs; we’ll get “so excited” with Jessie Spano; we’ll proclaim “Texas forever” with Tim Riggins; we’ll angstily share our “So-Called Life” with Angela Chase; we’ll jump the shark with Arthur Fonzarelli. And we’ll meet a series of Freaks and Geeks along the way. Throughout, we’ll consider why American culture puts such weight on high school as a setting for processing questions of class, race, gender, and sexuality, and
we’ll probe the extent to which IMSA sees itself reflected in famous representations of American high school. We’ll consider what it means to apply rigorous academic thinking to oft-dismissed pop-cultural texts and get to know some basic methods from scholars working on television. We’ll watch a lot of TV this week, but we’ll also think hard about what American high school is and could be.

Prerequisites: None

Cost: None

Eric Rettberg  Current Faculty erettberg@imsa.edu
Leah Kind  Current Faculty lkind@imsa.edu

If you give an IMSA student a cookie...

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

...they’ll want to know what’s in it and how it was made! This intersession will dive into the science behind the ingredients used to make chocolate chip cookies (flour, eggs, butter, etc.) and how each of them contribute to the taste and texture of the cookies. Ever wonder why some cookies are crispy and some are chewy? Or why some are flat and some seem more rounded? This session will answer all those questions and give you the knowledge you need to design a recipe to make your own perfect chocolate chip cookie. Glass of milk optional!

Prerequisites: None

Cost: None, flour and cookie ingredients for final project will be donated by sponsors

Neeta Kulkarni  Alumni Class of 2006 ms.neeta.kulkarni@gmail.com
Cindy Wang  Alumni Class of 2006 cindy.wang1@gmail.com
TBD IMSA Sponsor  Current Faculty/Staff

Indoor Rock Climbing

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

This intersession is designed for anyone interested in rock climbing, regardless of any prior experience. Two IMSA alumni will be teaching and leading a course for students to gain exposure to indoor rock climbing (both bouldering and top-roping). Recently, rock climbing has risen to prominence, even earning its place as an Olympic summer sport for Tokyo 2020. During this course, we will be spending some time (~2 days) reviewing climbing rules, safety, techniques, and watching famous climbers/competitions. The rest of the course will be spent taking trips off-campus to a local climbing gym to allow students to practice the techniques themselves and better hone their climbing skills.

Prerequisites: None

Cost: Estimated cost for participation ~$50 per person for renting climbing gear and entrance fee to the climbing gym plus $5 per day (3 days) if student needs to rent shoes.

Shelly Teng  Alumni Class of 2015 tengs@seas.upenn.edu
Joanne Lee  Alumni Class of 2015 leekww@gmail.com
Michael Teng  Alumni Class of 2011, michaeljteng@gmail.com
Introduction to Dungeons and Dragons

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

You have probably heard of Dungeons and Dragons before. It is the world's first role playing game (RPG). In an RPG you take on the role of a single character, guided through a scenario or adventure by the game master. You control your character's choices, and the game master controls how the world and its inhabitants respond to you. In a video game, you are limited solely to the actions coded within. Every problem has finite solutions. In a tabletop RPG, you can literally do anything. D&D is the genesis of all role playing mechanics in gaming history, and currently has more worldwide players than ever before. In this intersession we will be delving into dungeons, practicing improv theater, solving challenging puzzles, outsmarting monsters, and learning to love the roll of the dice. This class is targeted at beginners and those unfamiliar with tabletop role playing games, but participants of all levels are welcome. Learn to enjoy Dungeons and Dragons, and understand why it is such an enduring cultural force.

Prerequisites: None; but beginners preferred

Cost: None

Erik Swanson  Current Staff eswanson@imsa.edu

Marcel Duchamp and Ready-mades

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

Students will be given an introduction to the French artist Marcel Duchamp and the art form of ready-mades. This intersession program will include a field trip to the Art Institute of Chicago where one of Duchamp’s most iconic works, Bottle Rack, was acquired just this year.

Students will learn to exalt and elevate the everyday into works of art that challenge our accepted definitions of beauty, representation, perspective and craft. Just as Marcel Duchamp responded to the rise of industrial production, students will define contemporary understandings of the ready-made. They will reexamine and transpose current trends and issues important to them in unexpected contexts and perspectives, culminating in an exhibit of their own artistic work on the last day of intersession.

Prerequisites: None

Cost: None

Joe Marshall  Current Faculty jmarshall@imsa.edu
Joyce Symoniak  Current Faculty jsymoniak@imsa.edu

Orchestral Symphonies by Women Composers

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

For too many years, women were discouraged from composing large scale works. Today, however, this discriminatory action has largely been abated. In the last 30 years, large scale symphonic works by women composers have been significantly recognized with performances and awards. During this week,
you will listen to several symphonies and have an opportunity to discuss them. Among the composers discussed will be Grazyna Bacewicz, Amy Beach, Gloria Coates, Louise Farrenc, Barbara Harbach, Libby Larsen, Emilie Mayer, Alla Pavlova, Florence Price, Shulamit Ran, and Ellen Taaffe Zwilich.

**Prerequisites:** None

**Cost:** None

**Michael Keyton  Alumni Faculty fresnarus@att.net**

**Time Travel Through Film and Story**

Part Time Afternoon 1:00 pm - 4:00 pm Mon-Fri

We’ll begin by exploring time travel from the perspective of real-world science, and give a brief overview of the possible physics behind theories of time travel, and what the real-world limitations are. Then we'll dive into exploring time travel through film, television, and short story, breaking down and categorizing different “rules” of time travel. We'll examine a wide variety of portrayals and decide for ourselves what the most plausible means and rules of time travel are. We’ll also discuss humanity’s enduring fascination with time travel. Three short stories will be required reading, and there will be a brief presentation on the final day.

**Prerequisites:** None

**Cost:** None

**Eric Engelhard  Alumni Class of 1996 caliban1717@gmail.com**

**PART-TIME EVENING SESSIONS  Part Time Evening 6:30 pm - 9:30 pm Sun-Thurs**

**Cybersecurity Know-How**

Part Time Evening 6:30 pm - 9:30 pm Sun-Thurs

Cybersecurity refers to the use of network architecture, software, and other technologies to protect organizations and individuals from cyber-attacks. The objective of cybersecurity is to prevent or mitigate harm to – or destruction of – computer networks, applications, devices, and data.

Cybersecurity has never been simple. And because attacks evolve every day as attackers become more inventive, it is critical to properly define cyber security and identify what constitutes good cybersecurity.

Why is this program so important? Because year over year, the worldwide spend for cybersecurity continues to grow: 71.1 billion in 2014 (7.9% over 2013), and 75 billion in 2015 (4.7% from 2014) and expected to reach 101 billion by 2018. Organizations are starting to understand that malware is a publicly available commodity that makes it easy for anyone to become a cyber attacker, and even more companies offer security solutions that do little to defend against attacks. Cybersecurity demands focus and dedication.

**Prerequisites:** Minimal Knowledge of Computer, Internet and Information Security. Laptop required for each student.
Cost: None

Velupillai Manivannan  Current Parent  mvelupillai@gmail.com
Santhi Manivannan  Current Parent  santhisand@gmail.com
TBD IMSA Sponsor  Current Faculty/Staff

PART-TIME EVENING SESSIONS  -  Part Time Evening 6:30 pm - 9:30 pm Mon-Fri

Scholastic Bowl Prep

Part Time Evening 6:30 pm - 9:30 pm Mon-Fri

This intersession offering is for Scholastic Bowl club members. The first objective will be prepping for states/nationals in an attempt to qualify and send two teams to nationals. The second objective will be to improve question-writing skills for potential fundraising via contributing to a set in the 2019-2020 year.

Prerequisites: Scholastic Bowl Club Member

Cost: None

Dennis Loo  Current Faculty  dloo@imsa.edu
NOTE ON INTERSESSION COSTS:

Students with demonstrated need (at this time, we are restricting travel scholarships to those families who are Tiers 1 & 2) may be eligible for aid to offset intersession costs. Seniors will be given priority. Students are eligible for only one scholarship per student over the three-year period for an out-of-state trip. Note that funds for scholarships are extremely limited this year. Anyone seeking funds MUST complete the application provided at the end of this catalog by Tuesday, October 23, 2018.

Please check your email for more details from intersession sponsors. Some of the trips require participants to make a commitment soon. Feel free to send questions directly to the sponsors.

Art and Architecture in Italy – SESSION IS CLOSED**

Full Time Off Campus

Students will be visiting Rome, Vatican City, and Florence, Italy, to have a first-hand experience with the art and architecture of these three cities. We will be visiting multiple art museums, churches, and historical sites each day. We will also have the opportunity to hear the Pope speak in person at the Vatican. The trip is currently scheduled for January 3 – 10, 2019. Goals of the intersession include students being able to recognize particular types of architecture based on characteristics such as columns and archways of buildings. They will also learn about the evolution from 2-D to 3-D imagery within paintings, themes within Carvaggios, and symbolism within sculptures. For example, we will discuss the proportions of the David and the choice of the sculptor to include the sling and rock used to defeat Goliath. We will be hiring local tour guides and specialists in key locations where possible.

Students will experience the presence of Roman gods and goddesses as well as classical and modern Christianity within Italian art and architecture. We will conduct daily debriefing conversations over meals. Topic questions will be directly connected to the historical sites visited each day. Students will also spend time sketching or writing about their experiences throughout the week.

Prerequisite(s) Students must complete an application sent by the sponsors and must be selected. Students must have a current passport. Students must attend 2 of 3 evening sessions to learn art, architecture and Italian history basics during the fall semester. Dates of sessions TBD. Sessions to be led by IMSA faculty.

Cost(s) Maximum cost $2400 per person - cost will include flight, hostel, travel insurance, breakfast each day, and dinner 3 evenings. Lunch and other dinners will be paid by the student while in Italy.

Note: Thursday, January 3, 2019 departure, Thursday, January 10, 2019 return

Julie Dowling Current Faculty jdowlin@imsa.edu
Patrick Kearney Current Faculty pkearney@imsa.edu
**Cultural Explorations and Language in Spain**

Full Time  Off Campus

This is an opportunity for students to explore the beautiful capital of Spain while learning about the culture, cuisine, and history of Madrid. They will also put to practice all the skills they have learned in present or past Spanish classes. Students will have daily trips all over the city, each with a different focus on a piece of daily life in Madrid. Students will be expected to speak mostly in Spanish for the duration of the trip and keep a journal.

**Prerequisite(s)**  Students do not need to be currently be enrolled in a Spanish class but will need to be able to be able to do an interview in Spanish. Native speakers are welcome to apply! A reference letter from RC is needed.

**Cost(s)**  $2400

**Note:**  Thursday, January 3, 2019 departure, Friday, January 11, 2019 return

Barbara Hernandez  Alumni Staff  barbara.hernandez16@gmail.com
Marcos Beltran  Current Staff  mbeltran@imsa.edu

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**Exploring African American Culture and History in Washington D.C**

Full Time  Off Campus

The history of the African American experience in America is a rich and painful one. This intersession will explore the history and culture of African Americans through Art, History, Food, and Education with D.C. as the backdrop to our learning playground. There will be self-guided and docent-led tours to the Smithsonian National Museum of African American History, Mary McLeod Bethune Council House, The Historic House of Frederick Douglass, National Museum of African Art, and Martin Luther King Jr. Memorial combined with daily discussions and journal entries.

**Prerequisite(s)**  Character reference from the student’s current Residential Counselor and sponsor approval.

**Cost(s)**  $1300.00 student fee includes airfare, lodging, travel insurance, daily breakfast, local transportation, lunch at the Smithsonian National Museum of African American History and dinner for one night. Students are responsible for remaining meals and optional souvenirs.

**Note:**  Sunday, January 6, 2019 departure, Friday, January 11, 2019 return

Candice Abioye  Current Staff  cabioye@imsa.edu
Anita White  Current Faculty  awhite@imsa.edu
Tiana Johnson  Current Staff  tjohnson1@imsa.edu
France Exchange Intersession – SESSION IS CLOSED**

Full Time                Off Campus

Bon Voyage! We are embarking on a two-week adventure and learning opportunity in France in which students will stay with host families and enjoy a true taste of French culture and language. After hosting ISSF this summer, IMSA students will enjoy attending class in one of our fellow ISSF participant schools as well as enjoying excursions to various scientific and cultural locations across the country. This intersession will also include 3 days and 2 nights in Paris.

Prerequisite(s)           Students must be a junior or senior AND be enrolled in French 2 or above.

Cost(s)                   $2400 is the estimated cost, paid for by students/families (could vary slightly if there are more or less than 16 students). This price includes round-trip airfare, lodging (both with host families and the two nights at a hotel in Paris), breakfast each day, all transfers, federal taxes, miscellaneous airline/airport taxes, tickets to all museums, exhibits, monuments and attractions, two dinners in Paris, basic travel insurance (upgraded cancellation policies are available for purchase), and fees/surcharges. We are estimating an additional $80 per student per day that we are in Paris for snacks, souvenirs, etc. Students may also need a little extra money for events with their host family, but host families usually cover all meals and transportation while students are staying with them. Not included in program price: passport fees, 3 lunches in Paris, and baggage fees imposed by the airline where applicable. Participants are responsible for applying for their passport from the government and paying the required fees (approximately $110). Allow a minimum of ten weeks to process and receive a U.S. passport. If a student already has a passport, check the expiration date. Make sure that it does not expire until at least SIX months after the completion of the program. (Non-U.S. citizens should contact the French Consulate in Chicago to inquire about visas). Additional spending money depends entirely on the individual.

Note:                    Saturday, January 5, 2019 departure, Saturday, January 19, 2019 return

Nadia Miskowiec  Current Faculty  nmiskowiec@imsa.edu
Erin Micklo  Current Faculty  emicklo@imsa.edu

**Note: Information regarding this session was previously shared via email with eligible students and their parents. Tickets have already been purchased.
Kenya Kisumu Trip for IMSA IN2 Kenya Launchpad Students– SESSION IS CLOSED**

Full Time Off Campus

Over the past two years, a team of IMSA students has been developing and prototyping Social Entrepreneurship businesses to benefit impoverished people in Kisumu, Kenya. This began with their LEAD/SocEnt experience sophomore year and resulting changes they made after pitching their ideas to Joseph Opiyo, the founder of Friends Pioneer from Kisumu Kenya, who was a keynote speaker at their spring event. Their junior year they became an IN2 project team and this year they are the team in the IN2 Impact Launchpad. This trip offers the opportunity to understand the culture, conditions, political environment, stories and daily needs of Kisumu residents. It is primarily focused on the people on the poor side of town but will also provide an opportunity to see and understand people on the rich side of town. Through this direct daily comparison and contrast, students will gain insights into the intricacies of daily life for these two economically diverse groups.

Prerequisite(s) Students must be one of the 9 members of the IMSA IN2 Kenya project team.

Cost(s) $2500 per student

Jim Gerry Current Staff jgerry@imsa.edu
Susan Fricano Current Staff sfricano@imsa.edu

The Many Facets of Japan

Full Time Off Campus

When you hear “Japan” what comes to your mind first? Anime, manga, J-pop or even K-pop? What if I told you that you were right and wrong at the same time and you had an opportunity to find out for yourself! Students will get a chance to experience Japan and all it has to offer beyond what is portrayed in pop culture media. They will develop a deeper understanding of the meaning of culture as well as how various influences, internal and external, make-up how they identify and how that identification is interpreted. We will explore the many facets of the culture and history through our thematic day-to-day itinerary. The primary location for the duration of our stay will be in the Tokyo area. There will be meetings before to compile initial ideas and gain basic understandings, record keeping of their experiences with a journal while there, and a debriefing session upon return.

Prerequisite(s) Must have valid passport.

Cost(s) $2500/ student

Note: Sunday, January 6, 2019 departure, Saturday, January 12, 2019 return

Natasha White Current Staff nwhite1@imsa.edu
Andrea Stuiber Current Staff astuiber@imsa.edu
Mexico City: Language and Culture Immersion

Full Time Off Campus

Students will get a chance to practice and improve their Spanish by interacting with the locals, attending a theater performance, visiting world-renowned museums, and exploring neighborhoods. They will have an opportunity to climb up ancient pyramids, hang out at a castle, discover the many attractions of the oldest urban park in America (no, not the country), ride a bike or take a stroll on an iconic avenue, and experience first-hand what they have learned about in their classes. The exact dates are dependent on airfare and hotel availability, however, the plan is to depart on the Saturday before intersession and return on Thursday.

Prerequisite(s) Though students need not be enrolled in a Spanish class, a certain level of Spanish is required. Students will need to answer some questions as part of the selection process. All things equal, priority will be given to seniors.

Cost(s) Approximately $1400/student. The cost includes airfare, trip insurance, accommodations, and activities. I will have a better sense of the cost once I know how many students are going. The cost does not include food, incidentals, and optional souvenirs. Students can reasonably expect to pay between $5 - $15 per meal. Students are responsible for the cost of the trip.

Note: Saturday, January 5, 2019 departure, Thursday, January 10, 2019 return

María del Carmen De Avila Current Faculty mcdeavila@imsa.edu

Modern Physics in Europe - Einstein to CERN

Full Time Off Campus

The objective of this session is to gain both a historical and current perspective on some of the most important ideas in modern physics and to engage in the European geography and institutions that are relevant to these ideas.

There are two primary threads to this session. The first is to follow the geographic path Einstein took during the first 26 years of his life, just past the seminal year of 1905, and to explore some of the influences behind his theories, especially his special theory of relativity. The second is to spend time at The European Organization for Nuclear Research, known as CERN, whose purpose is to operate the world's largest particle physics laboratory. CERN runs many experiments that verify and explore the limits of the standard model of particle physics.

A tentative itinerary for this project includes visits to:

- Ulm, Germany, Einstein’s birthplace and childhood home.
- Munich, which has been home to many well-known physicists including Einstein when he was a teenager, Plank, Heisenberg, and Pauli. It is also the location of the Deutsches Museum, the largest museum of science and technology in Europe.
- Zurich, Switzerland, which was Einstein’s home from 1896-1900 and 1909-1911.
• Bern, Switzerland, where the famous Swiss Patent Office and Einstein Museum are located.

We also plan to travel to Geneva, Switzerland to spend time at CERN, site of the discovery of the Higgs boson, and participate in a number of activities through S'cool Lab, which provides opportunities for student groups to recreate experiments crucial to the development of particle physics.

**Prerequisite(s)**
This project has a strong academic focus, so students should have a genuine passion for science. Previous knowledge of modern physics is not required. Students will do prep work in advance by reading *Einstein for Beginners*, preparing for laboratory experiences, and possibly participating in online short courses. Students should also expect to keep daily journals.

**Cost(s)**
The cost of this project is projected to be $2600 per student, depending on the number of students involved. This fee will cover airfare, lodging, ground transportation, meals, activities, and museum expenses. Students are responsible for the cost of the trip.

**Note:**
Tentative – Saturday, January 5, 2019 departure, Saturday, January 12, 2019 return

Matthew McCutcheon  Current Faculty  mmccutcheon@imsa.edu

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**New York City: Music and Theatre Tour**

**Full Time**  Off Campus

Students will attend one Broadway show, an Opera at the Met, and a Symphony performance at Lincoln Center. In addition, they will tour the iconic sites of New York City including the Empire State Building, Rockefeller Center, Chinatown, Central Park, and much more.

**Prerequisite(s)**
An application will be required and $350.00 deposit will be due Nov 9th

(No exceptions)

**Cost(s)**
$1500-2300 depending on number of students

**Note:**
Tuesday, January 8, 2019 departure, Friday, January 11, 2019 return

Mary Beth McCarthy  Current Faculty  mmccarthy@imsa.edu
Emily Cooley  Current Faculty  ecooley@imsa.edu