

# SP 2021 Independent Study Period







#### **Clues "The Truth Finder" Solving the Crime**

Forensic Science is a fine observation to recognise evidences and navigate it to solve intentionally or unintentionally executed crime. This definition itself delineates the vital role of Forensic Science in the criminal investigation process. The Forensic investigation process uses different theories and approaches drawn from various disciplines to help trace and identify clues and establish its links to a crime. These approaches not only help to detect and identify the clues but also help to reconstruct the crime event. In this course students will learn to detect and identify the most commonly found clues (Fingerprint, blood stains) at the crime scene and establish its link with the crime, suspect or victim. The course will provide awareness among the student about the significance of clues and its role in forensic investigation process and also prime them to prevent becoming a victim.



Ritesh Kumar Shukla is working as Assistant Professor in Biological and Life Sciences, School of Arts and Sciences, Ahmedabad University. He completed his Masters in Forensic Science and PhD in Toxicology. He is a trained fingerprint expert from DFS Forensic Science Laboratory, Gandhinagar, Gujarat. He is also a part of "Tata Consultancy services (TCS)" as "Subject Matter Expert" in the field of Forensic Biology.

**Course Fee** 

Rs. 9000 +1500(includes supplies)

**Credits 3** 







## Biomimicry - Think Like 3.8 Billion Years of Evolution! (Nature Integrated Design Thinking & Living)

The Biomimicry workshop will provide an introduction to a new discipline that looks at nature as a source of ideas and solutions to help solve human challenges. Each day during the course you'll get to see and learn something new about the amazing patterns, designs and solutions in nature. You will also get to play learning games watch movies, quizzes and work in groups as you learn about biomimicry tools and methodology. You will learn about the latest biomimicry tools and methodology that you'll apply as a group project to develop a nature inspired innovation/solution to a human challenge.



Prashant Dhawan is the Co-founder of "Biomimicry India Lab and Studio" and the Biomimicry India Network. He holds a degree in MS (Master of Science) in Biomimicry from the Arizona State University, U.S.A and Biomimicry Professional Certification from Biomimicry 3.8, USA

**Seema Anand** is a Biomimicry Specialist (Biomimicry 3.8 Institute, USA, 2011) & a practicing Architect in Bangalore. She is a visiting faculty in RV College of Architecture, Bangalore, India.

**Course Fee** 

**Credits 3** 

Rs. 9000









#### **Creating Impactful Short Films**

The course work will introduce students to basic film-making process. The three major building blocks of films-Pre-Production, Production and Post-Production will be taught. It will teach them to write conceptual and executable scripts and screenplays. The logic and techniques to write a gripping and engaging short film will be taught. It will also be an introduction to film-production, shoot scheduling, shot-divisions and sound recording. The basic cameras, light equipments and sound recorders will be demonstrated. It will teach them to do basic film editing. The entire course-work will be a 'Learning by Doing' exercise of each stages of film-making.



Tanmay Shah, Founder & CEO at FridayFictionFilms is a former Research Associate at IIT-Bombay. He holds a Limca Book Of Record, India Book Of Record, Asia Book Of Record and Golden Book Of World Record for making 52 short films in 52 weeks in 2015. His short documentary-Pinch Of Salt has won 15 international film festival awards and is screened at more than 10 countries. FridayFictionFilms has served more than 90 clients under his direction.

Course Fee Rs. 9000

**Credits 3** 







#### **Creative Writing**

Creative Writing in English as an ISP course offers the opportunity to learn a variety of techniques to improve writing process and enhance literary expressions of language. The course inputs will focus on genres like short story, poem and dialogue. The engaging part of the methodology to be used in the course is the participants will require to go for fieldwork for searching for and identifying a story.

The course will help the students to unlock diverse creative impulses within them and provide them a channel to direct their flow of thoughts into more concrete manifestations.



Chirag Trivedi is a Faculty in Communication Area at Ahmedabad University, India. He is presently pursuing Ph D in literature with specific focus on literariness and canonmaking. His interests lie in Partition Literature, Dalit Literature and Culture Studies. He is presently involved in teaching courses on Literature, Culture Studies, Business Communication and Gender Sensitization. He fondly takes to creative writing especially poems, and translation of literary texts.

Course Fee Rs. 9000

**Credits 3** 







### 3D Printing/Additive Manufacturing for Multidisciplinary Applications

This course is designed to impart knowledge & skills related to 3D Printing & its applications in various sectors. It involves computational thinking to solve problems, as well as 3D Designing and 3D Printing to develop prototypes. The goal is to cultivate holistic thinking for problem solving and utilizing 3D Printing to convert ideas into physical objects.



Tarun Rijwani is a tech enthusiast, from a mechanical engineering background and working in the 3D Printing sector for the last five years. Currently he is the CEO of Rudrabots Pvt. Ltd. wherein they manufacture indigenously developed 3D printers for engineering and applications. Multi Material FDM system, Modified Core-XY mechanism and FDM based metal additive manufacturing (FAM) are some of the technologies that he has developed to make 3D Printing more efficient and cost effective. He also has experience of developing 3D Printing based processes for Engineering, Jewellery making and the medical sector.

Course Fee Rs. 9000

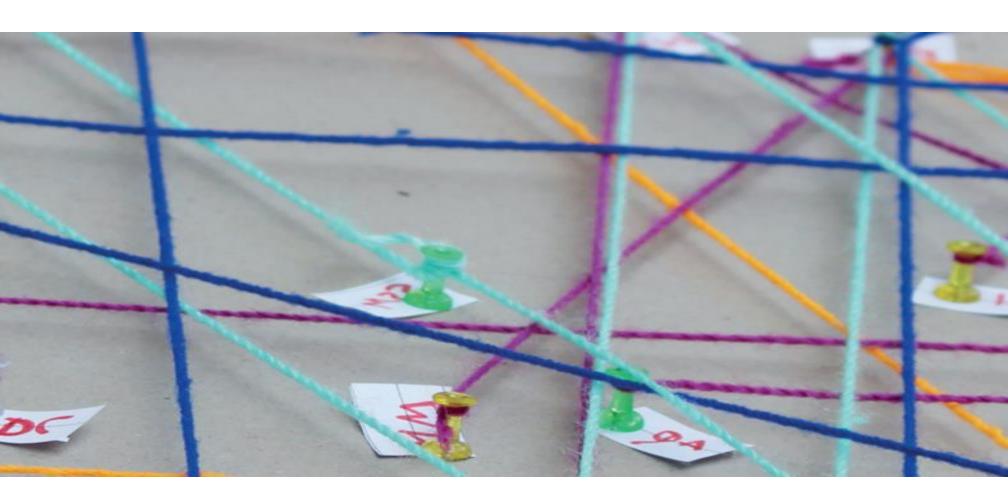
Credits 3

**Mode of Teaching** 

In Person







#### **Networks and Behaviour**

Human networks are constructed based on interactions and transactions. Through this course, we analyse the emergence of social networks in different situations and contexts to understand the ego-networks and behavioural impact. With the use classroom simulations and large number of literature work, participants will be encouraged to interpret the network structures and patterns. Political, social, and arts have always spread through networks and have demonstrated dynamic and unique structures. Utilizing them for various purposes of learning have also experimented successfully. Learning through unconventional sources like books, movies, non-fiction and fiction literature and TV series increases the engagement, involvement, and interest among the students.



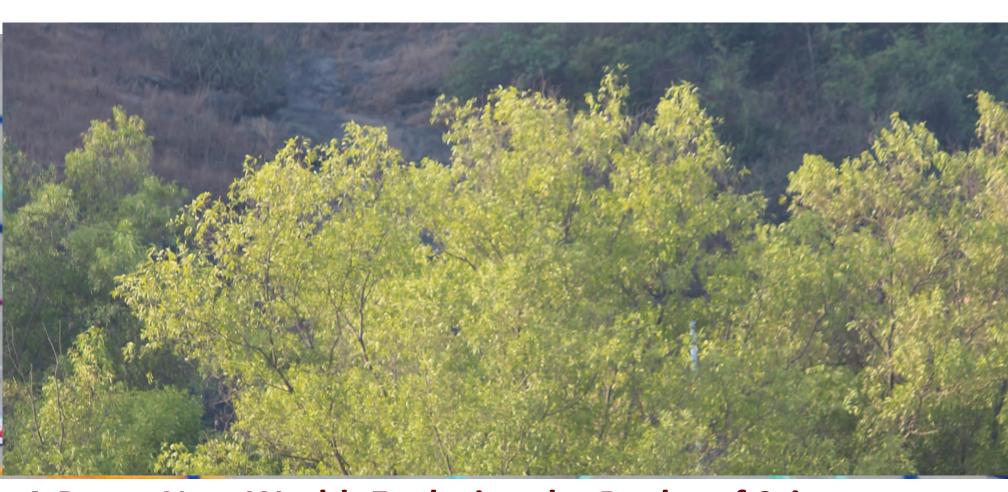
**Siddhartha Saxena** is a faculty in Management and organization area. His area of interest is network theory .He is interested in movies, travelling which is also the inspiration of the course.

Course Fee Rs. 9000

**Credits 3** 







### A Brave New World: Exploring the Realm of Science Fiction

Through a selection of texts and visual aids that engage with concepts of Space, Time Travel, Machines and Superhumans, Dystopia and Utopia. Students will be introduced to the genre of Science Fiction as a tool for comprehending the alternative vocabularies for capturing our world as much as imagining counterfactual possibilities and orders of reality. As with big data and mathematics, where the best models for understanding reality are very different from the commonsense forms we use to perceive it, this course provides highly abstract and imaginative models to understand our world.



**Tana Trivedi** is a faculty of Communication and Business History at the Amrut Mody School of Management, Ahmedabad University.



**Ananya Desai** is a writer and journalist, who has contributed features to The Hindu and The Times of India

Rs. 9000

**Course Fee** 

**Credits 3** 

Mode of Teaching
In Person



**Amit A. Nanavati** is a Professor at Ahmedabad University and an Adjunct Professor at IIT Delhi.



Create Valiant Heroes



Or Astounding Worlds



Or Predict Futures

What will your story do?







#### **Cyber Security**

This course is designed to introduce participants to the exciting field of Cyber security. Course helps participants to understand and implement fundamentals of Cyber security mechanisms and makes their surfing and digital transactions safe over the Internet.



**Kuntal Patel** is currently working as an Assistant Professor at the School of Engineering and Applied Science, Ahmedabad University. He has published more than 25 research papers at peer-reviewed Journals and Conferences. He is actively involved in Google, ACM-India and Govt. of Gujarat supported Activity Learning Project called CS-Pathshala. He is an editorial board member of Computer Science textbook of Gujarat State Education Board and contributes to GSEB's 10th standard CS textbook content and reviews those of 9th, 10th, 11th and 12th standards

**Open only for Btech Second Year** 

**Credits 3** 







#### Design Thinking, Designing Thinking

Design Thinking is a universally applicable activity to all walks of life, not just to designing products. You can design company strategies, annual reports, communication strategies to even food and your own closet. While it has its own rules and principles, Design Thinking is finally about...well...thinking. This course aims at exposing students to fun and offbeat ways of approaching Design Thinking, through hands-on activities, experiments and concepts from many different fields like design, brain science, physics, biology, cryptography, art and many more.



Aditya Bharadwaj is a mechanical engineer, and a post-graduate Product Designer from Ahmedabad. He has worked for nearly 10 years in various areas of design ranging from product design to graphic design to user-experience design. He approaches design as an applied-science perspective and tries to bring the understanding of various disciplines like physics, economics, biology, evolutionary sciences, etc. to design in order to make it more fun and deeplyimpacting.

Course Fee

Rs. 7500

**Credits 2** 







#### **Design Indirect**

The course is an opportunity to delve into such questions and find answers worth having. The process will look at discovering indirect / oblique opportunities from studying the inter-relationships that exist within the problem. Solutions will be visualised, designed, validated and prototyped.



Dinesh Korjan is a founder Partner of the erstwhile Studio Korjan, Ahmedabad, Dinesh is one of the pioneers of Product Design practice in India. Currently his passion is in the use of Design to solve larger, real world problems. He considers a 'systems' approach will enhance the effectiveness of Design and will lead to transformative interventions.

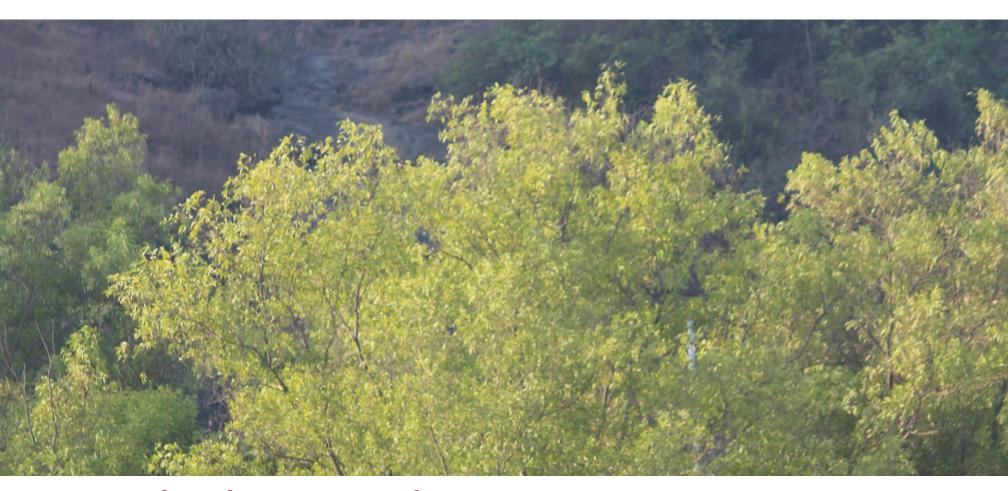
Course Fee

Rs. 7500

**Credits 2** 







#### **Every Slice has Two Sides**

Dissent has always been looked at with a very negative context. Through this course, we aim at instilling in students, the very idea of differences and the root to conflict. The course will start by addressing intrapersonal conflict and gradually move towards the understanding and interpretation of diversity, its genesis, interpersonal conflicts, its benefits and how it needs to be managed in an inclusive manner. The course will address these aspects through a series of activities, exercises and will be offered in a workshop mode. Students will be extensively engaged in introspection, identifying differences, accepting and embracing them; and thereby demonstrate improved levels of tolerance and acceptance. Discussions on campaigns and conflicts such as Chipko movement, #metoo, Narmada bachao, labour reforms and agricultural reforms are some of the areas that the course would touch upon.



Amrita Bihani has been working as a Faculty since 2010 at Amrut Mody School of Management, Ahmedabad University.

Course Fee Rs. 9000

**Credits 3** 

Mode of Teaching
In Person

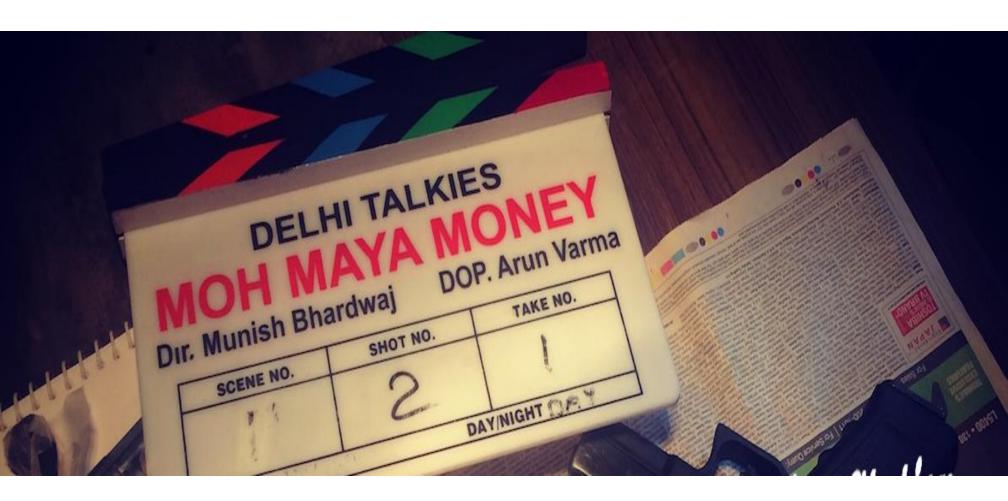


**Nimit Thaker** is a Lecturer in the Finance, Account and Control Area at the Amrut Mody School of Management, Ahmedabad University









#### How to write a Film Script

Stories are everywhere. We love to hear stories and we love to tell stories. Storytelling will never die, because it comes with the plan we are born with. And everyone has at least one story to tell. Cinema is a part of the world of stories. We go to the movie theatres to experience something new, to experience a story that we have not heard before. Sometimes we get a lot more than we are expecting and sometimes we are left disappointed. Have you ever thought about why that is? A lot of times, the answer to that question is, 'Because it was or was not written well. In the world of cinema, it is often said that a well written script is half the battle won. And film scripts have to be written in a certain way, keeping in mind a certain format, and making sure that it contains all the relevant information for all the people who are going to work in the film. Director. Cinematographer. Sound Designer. Editor. Art Director. Costume Designer. Actors and all the assistants. It is treated like a roadmap for all the departments



Munish Bhardwaj is a filmmaker, producer, writer and a teacher having more than 30 years of experience in cinema, theatre and TV. He is the director of the film Moh Maya Money and is also the executive producer of the critically acclaimed film Ankhon Dekhi. He has been teaching various cinema related courses for FTII and NFDC since 2017

Course Fee Rs. 9000

**Credits 3** 







### Making Health Contagious

Games for Health Promotion

#### **Making Health Contagious: Games for Health Promotion**

How do we gamify health promotion to advance collective approaches to wellbeing and make health contagious? This course is a project-based inquiry into the role of games and facilitated experiences in advancing health promotion objectives. The aim is to leverage the power of a transformative experience to motivate health advancing behavior, in contrast to attempting to convince with persuasive media. This participatory and playful approach to advancing health literacy is an essential pivot towards a post-pandemic world. This project will culminate in a series of student created games and experiences that will be shared at the ISP exhibition.



Evan Hastings is a theatre practitioner and Founder/Director of Shadow Liberation, participatory shadow theatre for dialogue. Evan has an MA in Counselling Psychology with a concentration in Drama Therapy from the California Institute of Integral Studies, San Francisco, CA, USA and a BA in Performance Education from the Evergreen State College, Olympia, WA, USA.

**Course Fee** 

Rs. 9000

**Credits 3** 







#### **Mathematics of Music**

Basic Mathematics and Music will be introduced theoretically and practically.

To create and classify patterns in music, Prastar, permutations, combinations, counting principles etc. will be discussed. The cyclic notion of pitch and modular arithmetic with western notations for notes is discussed. Physics and analysis of sound using instruments like Harmonium, Tabla, Morsing, flute, violin, Manjira, Harmonica, ukulele, conch etc. will be done. Some mobile and computer applications as use of technology in study and practice will be covered. Anatomy of the ear, human sound production will be touched. To give some tips to do some more music laykari, compositions, voice modulation and Advanced tips techniques will be taught. A good amount of references will be given.



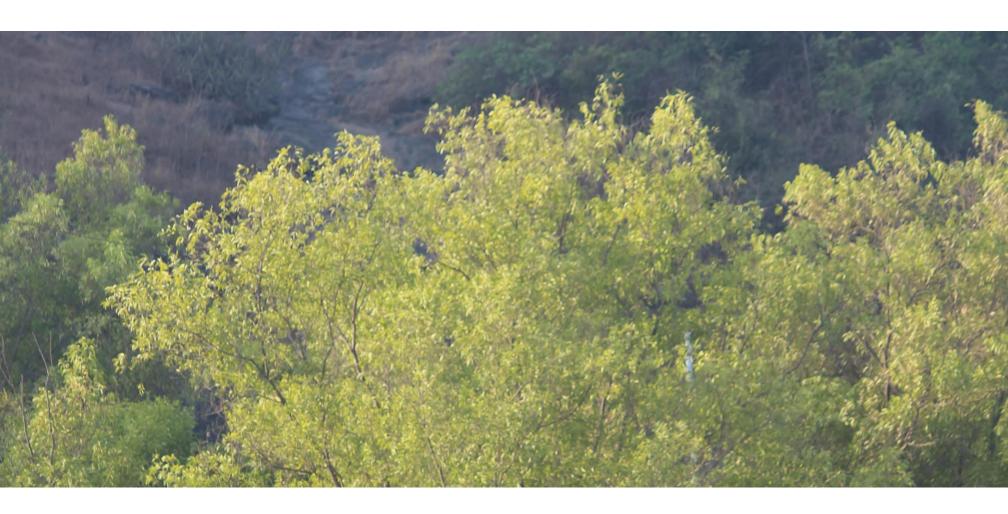
Gautam Borisagar is a Ph.D.(2014) from Department of Mathematics IIT Bombay. I have done workshops on voice modulation and drama in online mode during lock down. I have taken training in Vocal(SSC, and prarambhik through Gandharva Mahavidyalay), Tabla(sangeet praveshika poorn, Gandharva Mahavidyalay 2 years), Flute(currently learning as hobby), Harmonium( I have at home) and have some certificates also.

Course Fee Rs. 7500

**Credits 2** 







#### **Trees of Life**

Trees are one of the fascinating living things. They are not only large, grand, and majestic, but they are also very welcoming. They are equally welcoming to humans and non-humans alike. While some of us occasionally use them for shade (or checking SMS/Twitter), many depend on them for their livelihood. Using different methods (from the sciences and social sciences), we will document and understand life in and around urban trees in this course. What is their importance? Who visits them? Who depends on them, and who live on them?



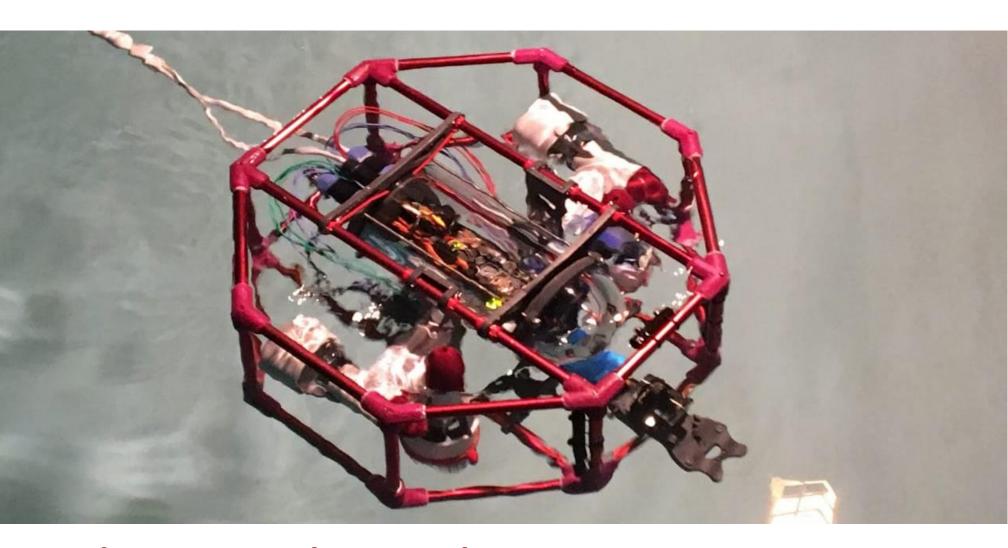
Shomen Mukherjee is an experimental ecologist who studies animal behaviour. I am also very much interested in understanding how socioeconomic inequities affect disease burden.

Course Fee Rs. 9000

**Credits 3** 







#### **Under Water Robot Development Programme**

This course aims to make the student well trained in terms of understanding the elements involved in Under Water Robot building & functioning. Students will not just learn the basic understanding of Under Water Robots & their functioning but also the software involved in creating the Under Water Robots & subsequent app developments. Each group of 5 students will develop one underwater robot. Students will also develop parts for the same using the 3D printer in the University. Certificate will be given on successful completion of the course.



Ezenith Education provides professional academic training in the form of workshops/internships/training programs to engineering students from Mechanical Engineering, Automobile Engineering, Electronics Engineering, E&Tc Engineering and Computer Engineering.

**Course Fee** 

Rs. 9000 +500(Includes cdrtificate)

**Credits 3**