

Abstract

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 will get to see and learn something new about the amazing patterns, designs and solutions in nature. You will also get to play learning games and go on field trips to explore nature. You will learn about the latest biomimicry tools and methodology, which you apply to a group project to develop a nature inspired innovation/solution to a human challenge.

Methodology

Lectures, presentations, field trips and outdoor exercises to observe and identify patterns in nature, in-class student presentations (peer learning), multidisciplinary explorations (building bridges with biology), Individual as well as group based assignments (short design explorations and one long design project), educational games, exercises, movies and activities, library/ web research and readings along with Introduction to using biological databases.

Academic Concept

- Operating conditions of planet earth
- Life's unifying patterns
- Integrating Biology into Design

Learning Outcome

The course aims to inform and equip participants in the following ways:

- Understand the concepts of nature's deep patterns/life's overarching principles and how these can inform the design of better and sustainable solutions
- Understand how to explore and learn from nature at various levels of product, process and systems
- Understand methods and tools to help in applying the Biomimicry approach to problem solving/innovation process: especially in the fields of Design Engineering and Business
- Reconnect with nature: learning to observe and take inspiration from nature (not about nature but from nature Observe and understand nature by function)

Tangible Outcome

Design explorations in various media:

- The group projects of the participants (Design Challenge- Integrating Biology in Design) Poster/ Presentation/Physical model/models of explorations of biology looking at nature functionally
- Short video/animation to summarise and explain the project

Recommended for

Those who are inspired by nature and have a spirit of inquiry and innovation.

Instructor



Prashant Dhawan is the Co-founder of the Biomimicry India Network. He holds a degree in MS (Master of Science) in Biomimicry from the Arizona State University, USA and Biomimicry Professional Certification from Biomimicry 3.8, USA. He also holds a degree in Architecture from SPA Delhi and an MBA from ISB Hyderabad. Prashant prefers to call himself an amateur researcher of issues related to sustainable happiness.

