BIOINSPIRED DESIGN

INTEGRATIVE BIOLOGY 32 - SPRING 2016

Control Number: 42148 | Units: 3
Instructor: Prof. Robert Full
Location: MW 12-1P, 2060 VLSB
F Discussion, 220 Jacobs Hall

NEW COURSE!

All fields and levels welcome.
No instructor permission required.

Rationale: Bioinspired design views the process of how we learn from Nature as an innovation strategy translating principles of function, performance and aesthetics from biology to human technology. The creative design process is driven by interdisciplinary exchange among engineering, biology, medicine, art, architecture and business. Diverse teams of students will collaborate on, create, and present original bioinspired design projects in our new Design Innovation Institute in Jacobs Hall. Lectures discuss the biomimicry design process from original scientific breakthroughs to entrepreneurial start-ups using case studies that include gecko-inspired adhesives; robots that run, fly and swim; artificial muscles; computer animation; medical devices and prosthetics while highlighting health, the environment, and safety.

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