

II. Biomimicry & Nature-Inspired Design:

- **A. General Principles & Examples:**

- **What We Can Learn From Nature | Janine Benyus**

- [What We Can Learn From Nature | Janine Benyus](#)

- Relevance:** A general introduction to biomimicry by Janine Benyus, a prominent figure in the field.

- **Use:** Introduction to biomimicry, overview of its principles.

- **Biomimicry is more than just good design.**

- [Biomimicry is more than just good design.](#)

- Relevance:** Discusses the broader implications of biomimicry beyond aesthetics.

- **Use:** Discussion of the philosophical and ethical dimensions of biomimicry.

- **Nature-inspired architecture | Austris Mailitis | TEDxRiga**

- [Nature-inspired architecture | Austris Mailitis | TEDxRiga](#)

- Relevance:** A TEDx talk on nature-inspired architecture.

- **Use:** Examples of nature-inspired design, broader context of biomimicry.

- **Biomimicry: Design Inspired by Nature**

- [Biomimicry: Design Inspired by Nature](#)

- Relevance:** Another general overview of biomimicry and its applications in design.

- **Use:** Introduction to biomimicry, examples from various fields.

- **B. Specific Examples (Slime Mold, Termites, Sponge):**

- **How a Slime Mold designed the Tokyo Railway System**

- [How a Slime Mold designed the Tokyo Railway System](#)

- Relevance:** Explains the famous experiment where slime mold behavior was used to model the Tokyo railway system.

- **Use:** Case study, example of network optimization inspired by nature.

- **The Insane Biology of: Slime Mold**

- [The Insane Biology of: Slime Mold](#)

- Relevance:** Explores the biological properties of slime mold.

- **Use:** Scientific background on slime mold behavior.

- **Heather Barnett: What humans can learn from semi-intelligent slime**

- [Heather Barnett: What humans can learn from semi-intelligent slime - YouTube](#)

- Relevance:** A TED talk on the potential applications of slime mold research.

- **Use:** Broader implications of slime mold research, potential for future applications.
- **Slime Mold Grows Network Just Like Tokyo Rail System**
[Slime Mold Grows Network Just Like Tokyo Rail System](#)
Relevance: Another video demonstrating the slime mold experiment.
- **Use:** Visual demonstration of the slime mold experiment.
- **Experiments with LIVING SLIME have jaw dropping results! – BBC**
[Experiments with LIVING SLIME have jaw dropping results! - BBC](#)
Relevance: A BBC report on slime mold experiments.
- **Use:** General overview of slime mold research and its potential.
- **See How Termites Inspired a Building That Can Cool Itself | Decoder**
[See How Termites Inspired a Building That Can Cool Itself | Decoder](#)
Relevance: Discusses the Eastgate Centre in Zimbabwe, a building inspired by termite mounds for passive cooling.
- **Use:** Case study, example of biomimicry in architecture (mentioned in the lecture).
- **Mimicking This Tiny Glass Sponge For Stronger, Lightweight Modular Building Materials**
[Mimicking This Tiny Glass Sponge For Stronger, Lightweight Modular Building Materials](#)
 - **Relevance:** Explores how the structure of a glass sponge is being used to inspire new building materials.
 - **Use:** Example of biomimicry in materials science, potential for future applications in architecture.