

- Learn Biomimicry -

# INTRODUCTION TO BIOMIMICRY

ONLINE SHORT COURSE BROCHURE



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Course design and development by



Course development sponsored by



# INTRODUCTION TO BIOMIMICRY

## ONLINE SHORT COURSE

### About this course



This course is designed for people who have heard of biomimicry, are curious about it, and may even have a basic understanding of it already.



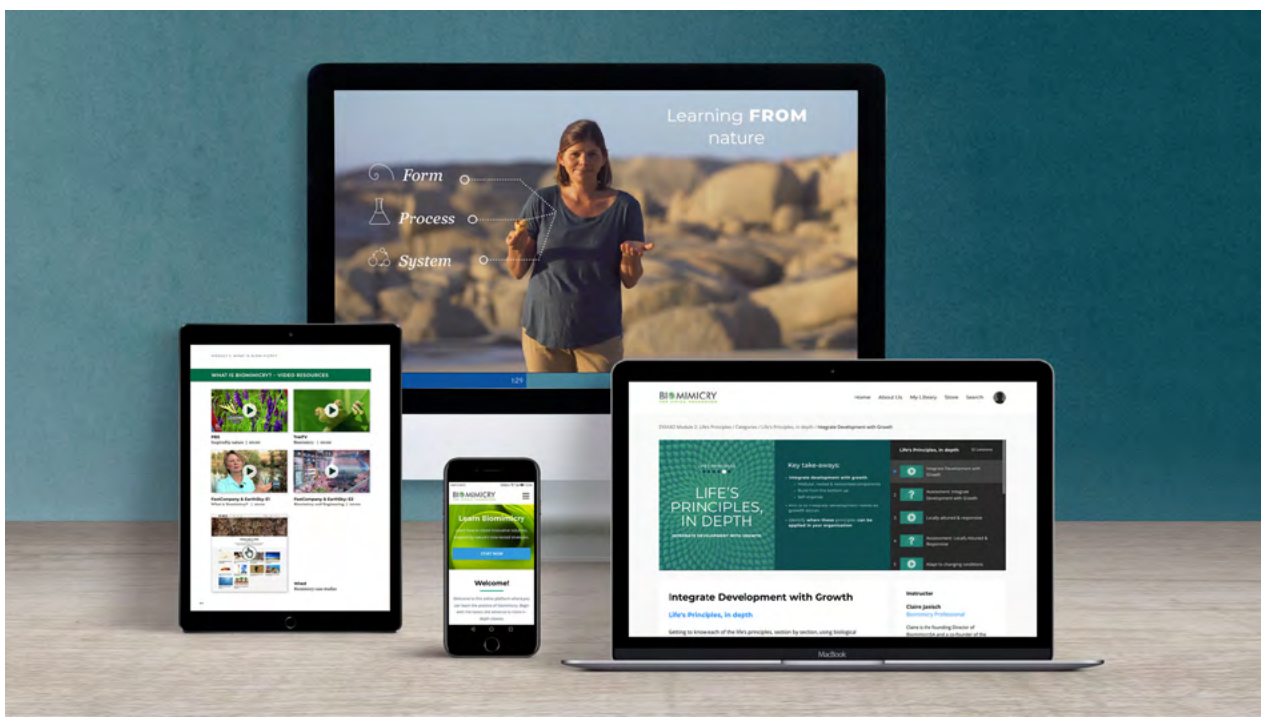
The objective of this course is to give you a strong foundational understanding of biomimicry. We go from fundamental concepts to in-depth explanations of how to practically apply biomimicry, using engaging visuals and real-world examples. You can use this knowledge to start applying biomimicry to your life and work, as well as to take your biomimicry learning journey further.



You can follow on from here with the next two online courses:

**Biomimicry Life's Principles** and **Biomimicry Masterclass**.

Additionally, you can combine all 3 courses with practical experience into a mentored, 6-month Learning Journey through BiomimicrySA. This culminates in a final project and a Biomimicry Practitioner certification.

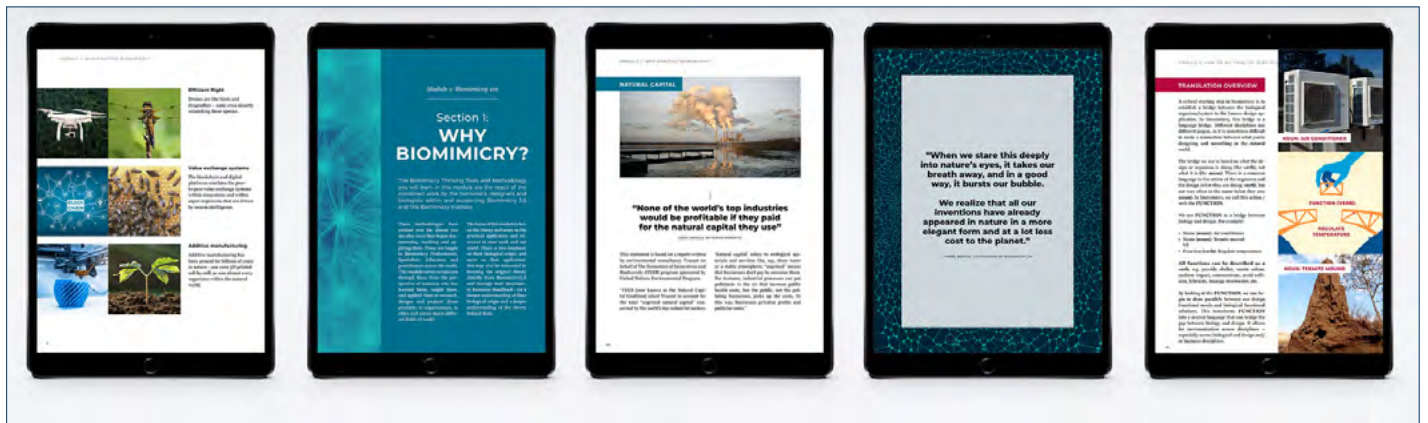
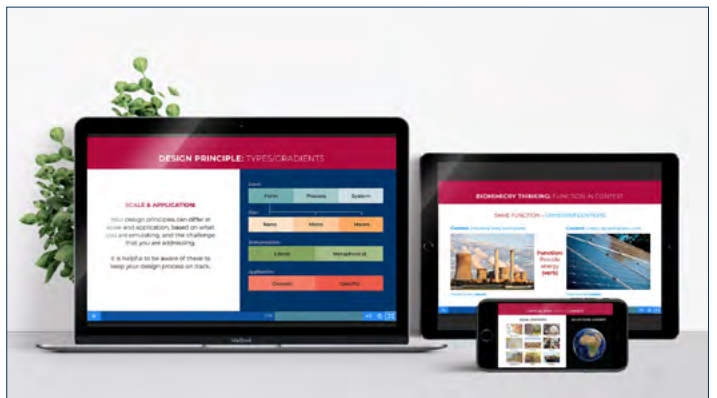
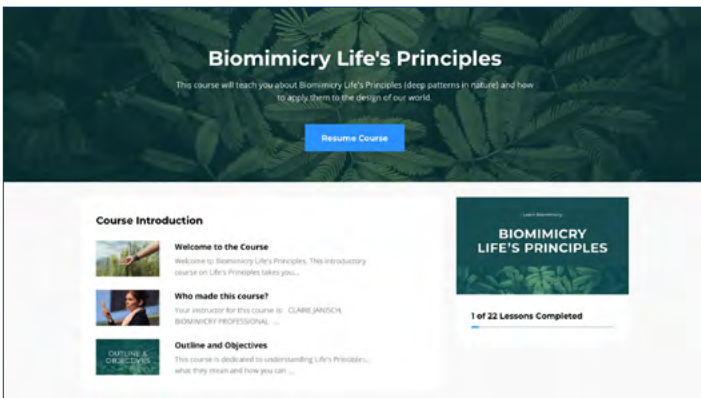
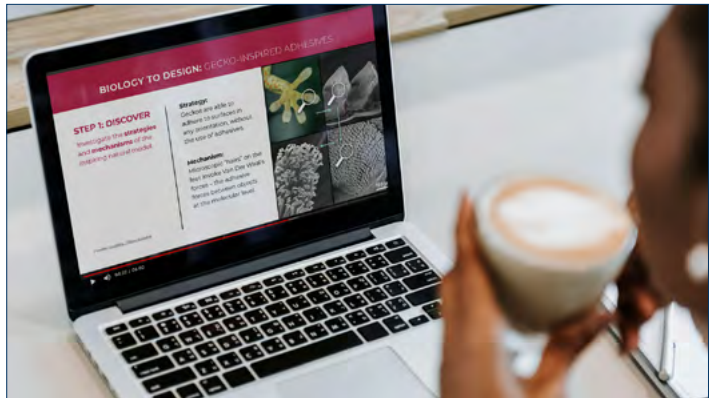
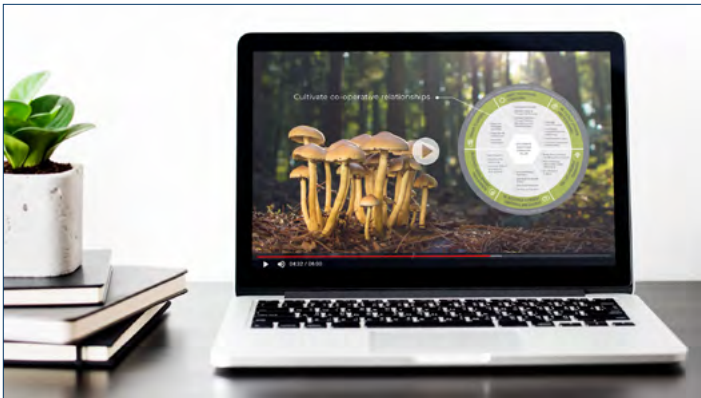


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### What do the courses look like?



# INTRODUCTION TO BIOMIMICRY

## ONLINE SHORT COURSE

### Course structure



The course consists of short videos and quiz assessments for each section, as well as online pdf Handbooks with more in-depth information and links for further reading.



You can make use of our Facebook page: **Learn Biomimicry Community** to ask questions, post comments and meet other people doing the courses. We can also set up a private Group if you are going through the courses with a cohort of peers or colleagues.



We recommend allowing approximately 5 hours over 1 month for this course. Courses are available for 2 months (62 days) after your initial access.



Upon course completion, you will receive a Certificate of Completion.

### Technical requirements



The course is accessible via almost any device, but we would recommend using a larger screen as there some detailed visuals.



The course is entirely online, so you will need internet access with a connection speed that is sufficient to stream videos.

# INTRODUCTION TO BIOMIMICRY

## ONLINE SHORT COURSE

### Course content



#### SECTION 1: WHY BIOMIMICRY?

Discover why biomimicry is so pertinent to our world; from exponential change, shifting paradigms, and socio-economic and environmental pressures that affect all humans. The 3 elements of biomimicry – (Re)connect, Ethos, Emulate – are also explained in this section.



#### SECTION 2: WHAT IS BIOMIMICRY?

In this section, we use detailed case studies to explore the 3 levels of biomimicry when emulating nature – Form, Process, and System.



#### SECTION 3: HOW DO WE DO BIOMIMICRY?

This section covers the biomimicry methodology: the step-by-step instructions and tools you need to start emulating natural models; for both the “Biology to Design” approach and the “Challenge to Biology” approach.

# INTRODUCTION TO BIOMIMICRY

## ONLINE SHORT COURSE

### Course content - detail

#### SECTION 1: WHY BIOMIMICRY?

Discover why biomimicry is so pertinent to our world; from exponential change, shifting paradigms, and socio-economic and environmental pressures that affect all humans.

| TITLE   | IN THIS VIDEO WE COVER:  |
|---|--|
| The Big Picture: Exponential Change                         | <ul style="list-style-type: none"><li>• What exponential change is, and how biomimicry relates to it.</li><li>• Why biomimicry is important for enabling exponential change.</li></ul> |
| The Big Picture: Socio-economic and Environmental Pressures | <ul style="list-style-type: none"><li>• Why biomimicry is important on a global social, economic and ecological scale.</li></ul>   |
| The 3 Elements of Biomimicry                                | <ul style="list-style-type: none"><li>• The core essence and values of biomimicry.</li></ul>   |
| Paradigms   | <ul style="list-style-type: none"><li>• An overview of how biomimicry fits within other paradigms, practices, and related philosophies.</li></ul>                                      |

# INTRODUCTION TO BIOMIMICRY

## ONLINE SHORT COURSE

### Course content - detail

#### SECTION 2: WHAT IS BIOMIMICRY?

Section 2 takes us into a deeper exploration of the different levels of biomimicry emulation – form, process and system.

| TITLE               | IN THIS VIDEO WE COVER:  |
|---------------------|--|
| Overview            | <ul style="list-style-type: none"><li>• Overview of what biomimicry is including a brief history of the field.</li></ul> |
| Form in Macro Scale | <ul style="list-style-type: none"><li>• Biomimicry applied to Macro-scale forms.</li></ul>                               |
| Form in Micro Scale | <ul style="list-style-type: none"><li>• Biomimicry applied to Nano / Micro-scale forms.</li></ul>                        |
| Process             | <ul style="list-style-type: none"><li>• Biomimicry applied to processes</li></ul>  |
| System              | <ul style="list-style-type: none"><li>• Biomimicry applied to systems</li></ul>  |

# INTRODUCTION TO BIOMIMICRY

## ONLINE SHORT COURSE

### Course content - detail

#### SECTION 3: HOW DO WE DO BIOMIMICRY?

Section 3 answers the question: “How do I actually do biomimicry?”. We take a dive into the theory and practical methodology, with case studies to illustrate.

| TITLE   | IN THIS VIDEO WE COVER:  |
|---|--|
| Shifting perspective:<br>Learning FROM vs<br>Learning ABOUT | <ul style="list-style-type: none"><li>• A core component of biomimicry: learning FROM nature.</li></ul>  |
| Translate Part 1:<br>Function & Context                     | <ul style="list-style-type: none"><li>• <i>How to learn from nature</i></li></ul>  |
| Translate Part 2:<br>Tools                                  | <ul style="list-style-type: none"><li>• The translation tools used for biomimicry: Biomimicry Taxonomy &amp; AskNature.org</li></ul>                                 |
| Translate Part 3:<br>Abstracting the design<br>principle    | <ul style="list-style-type: none"><li>• The first steps of how to turn biology into design</li></ul>   |
| Biology to Design:<br>Overview                              | <ul style="list-style-type: none"><li>• The Framework, Methodology, Tools, &amp; Processes for the practice of emulation for the Biology to Design method.</li></ul> |
| Biology to Design:<br>Case Studies                          | <ul style="list-style-type: none"><li>• The Whale Power case studies, which illustrates the Biology to Design method.</li></ul>                                      |

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## Course content - detail

### SECTION 3: HOW DO WE DO BIOMIMICRY?

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| TITLE                              | IN THIS VIDEO WE COVER:   |
|------------------------------------|---|
| Challenge to Biology: Overview     | • This video explains: The Framework, Methodology, Tools, & Processes for the practice of emulation for the Challenge to Biology method |
| Challenge to Biology: Case studies | • Case studies that illustrate the “Challenge to Biology” method.   |

# INTRODUCTION TO BIOMIMICRY

## ONLINE SHORT COURSE

## Behind the scenes

Your instructor for this course is:

**CLAIRE JANISCH, BIOMIMICRY PROFESSIONAL**

Claire is the founding Director of BiomimicrySA, she is both a graduate of and has been a trainer for the Biomimicry3.8 Professional Program. Claire spends her time exploring nature's genius in diverse ecosystems and shares this new way of viewing and valuing nature through biomimicry expeditions and coaching – teaching & training professionals, students and scholars. She also dives deeper into research for companies and organisations – translating nature's innovation and sustainability principles for the design of new products, processes & systems. Claire has been teaching and practising biomimicry for over a decade and loves most to vision and bring about new possibilities for the design of our world through the application of biomimicry at a systems level.

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**This course was designed** by **Claire Janisch** and **Jessica Berliner** (Instructional Designer and Biomimicry Practitioner, BiomimicrySA), with gorgeous film content and ongoing business support by **ReWild Africa**.

**The creation of this course was sponsored by Exxaro**, who sought to support the research and development of business models that facilitate a more sustainable and regenerative future. We thank Exxaro for being visionaries, and for making it possible for us to share this content with the world.

The Learn Biomimicry courses are **endorsed and supported by The Biomimicry Institute**, and we would like to thank them for growing this field and for cultivating co-operative relationships within it.



# INTRODUCTION TO BIOMIMICRY

## ONLINE SHORT COURSE

## Getting started



### REGISTER FOR A COURSE

Simply go to the **Learn Biomimicry website**, and either click through from the product listings on the Home page or **directly visit the Store**. Once you have purchased a course you are guided to a page where you can set up your profile and start the course!



### PURCHASING A COURSE

There are two basic options for purchasing a course –

- directly through PayPal on the Checkout page
- via EFT / direct Bank Transfer. In this case, let us know which course(s) you would like to purchase, and we will send you the invoice along with the respective access code(s).



When you are purchasing for 5 or more people, you are eligible for a bulk discount. NB – Make sure to contact us before you purchase!

## Contact us



If you would like to know more about our upcoming events, promotions and updates, please make sure that you send us your details in the “Want to stay in the know?” form on the **Home page of the website**.



You can follow us on social media:  
**Instagram** (@learnbiomimicry) and  
**Facebook** (Learn Biomimicry Community)



Or email our Director any time with any comments, questions or feedback:  
jess[at]learnbiomimicry.com