

- Learn Biomimicry -

BIOMIMICRY LIFE'S PRINCIPLES

ONLINE SHORT COURSE BROCHURE



Version 1 | 02-2020

Course design and development by

biomimicry^{sa} ReWild

Course development sponsored by

exxaro

BIOMIMICRY LIFE'S PRINCIPLES

ONLINE SHORT COURSE

About this course



This course is designed for people who have at least a foundational understanding of biomimicry, and those who want to know how to improve the way that we design all aspects of our world – from a water bottle to a city.



The objective of this course is to give you a strong understanding of Life's Principles, what they mean and how you can apply them. By learning from these deep design lessons, you should be able to:

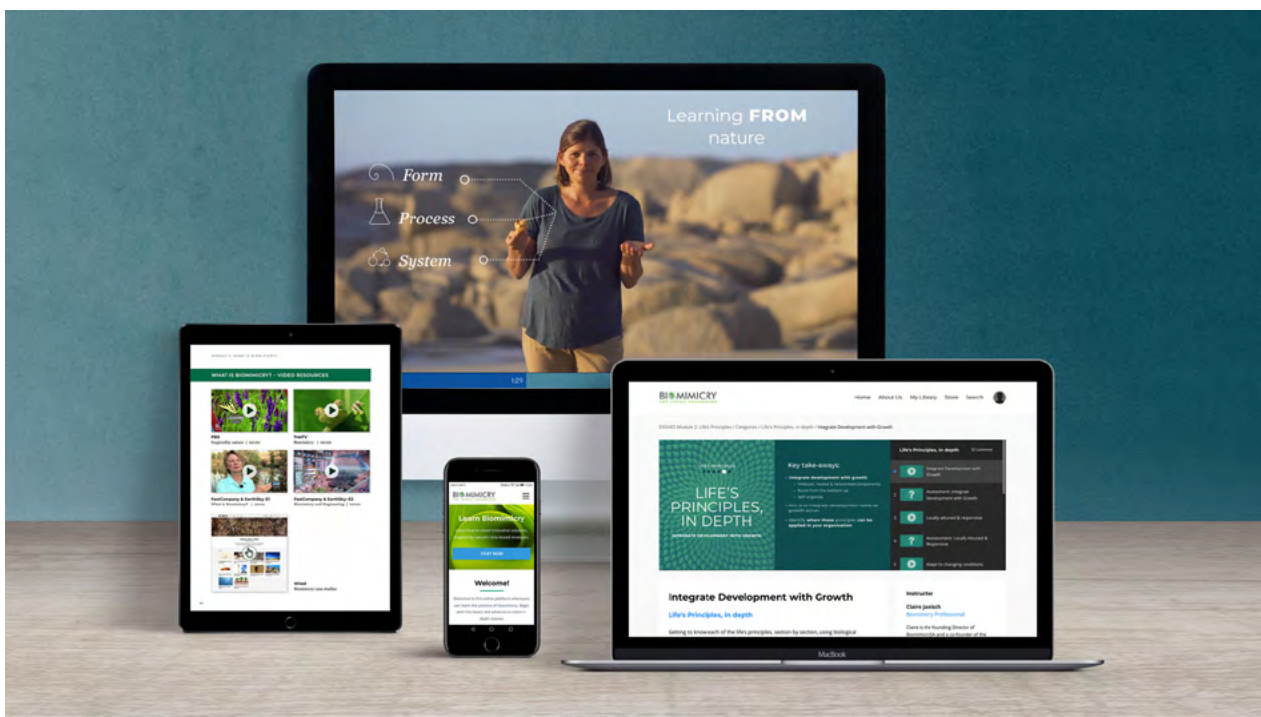
- Model innovative strategies,
- Measure your designs against these sustainable benchmarks, and
- Be Mentored by nature, with Life's Principles as your aspirational ideals.



You can follow on from here with the next online course:

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.

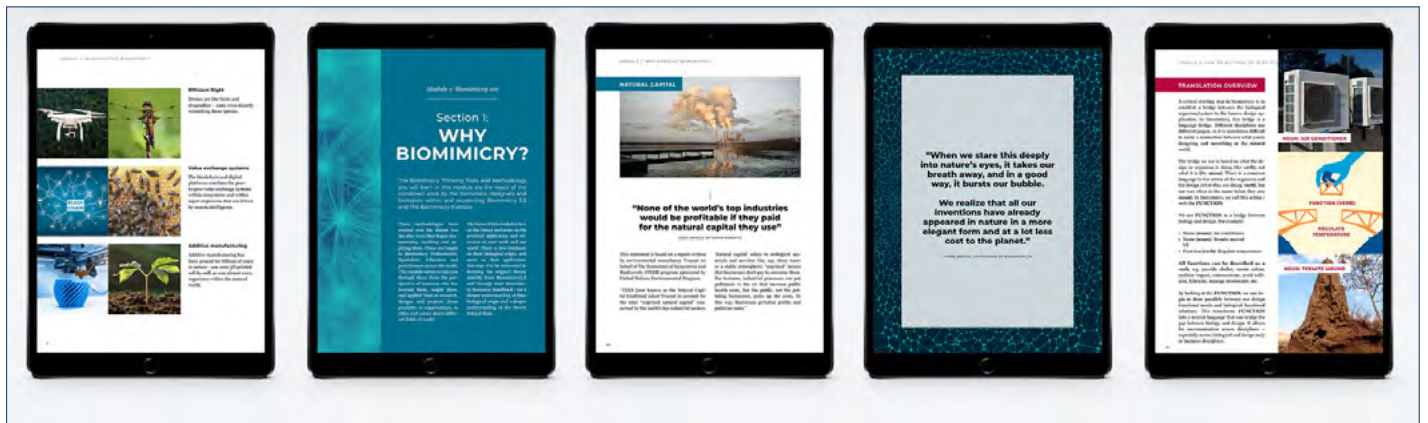
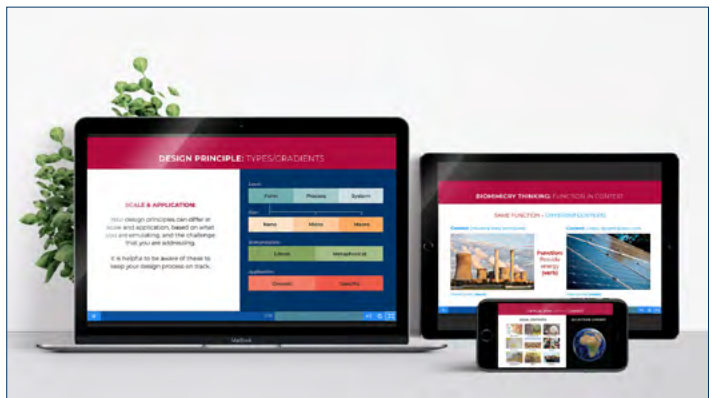
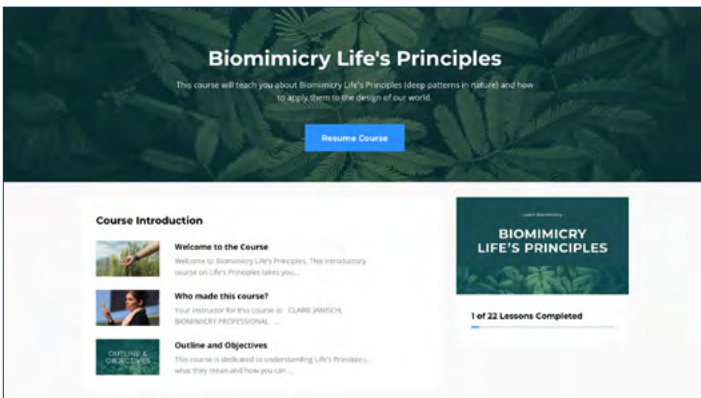
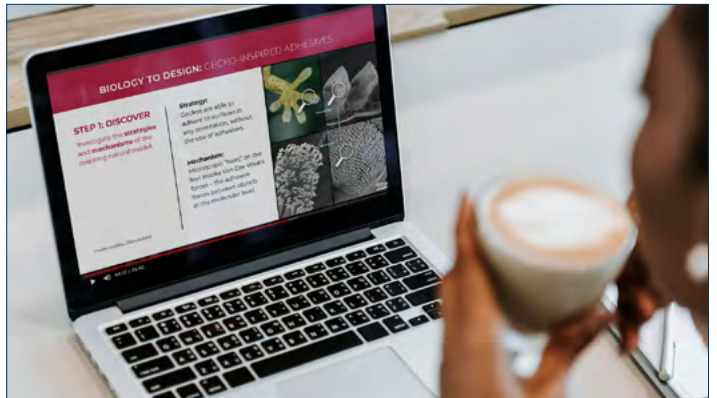
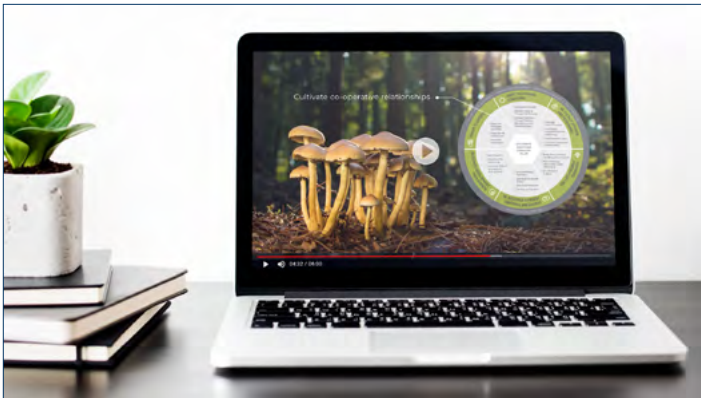


- Learn Biomimicry -

BIOMIMICRY LIFE'S PRINCIPLES

ONLINE SHORT COURSE

What do the courses look like?



BIOMIMICRY LIFE'S PRINCIPLES

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.

BIOMIMICRY LIFE'S PRINCIPLES

ONLINE SHORT COURSE

Course content

Life's Principles are deep patterns found in nature, and have the potential to make a huge impact on the design of our world. There are 26 principles, and like the 26 letters of the alphabet, it only takes a short while to learn what they are, but much longer to be skilled at using them.

This introductory course on Life's Principles takes you through their origin, descriptions, biological examples, case studies to illustrate, and how to apply them in the design of your world. Be prepared to change your world and your worldview on this journey into Life's Principles!

There are 3 Sections in this Module:



SECTION 1: INTRODUCTION

In this section, we introduce you to Life's Principles and other related concepts.



SECTION 2: LIFE'S PRINCIPLES, IN DEPTH

In this section, we take a deeper look at each of the main categories and their sub-principles.



SECTION 3: LIFE'S PRINCIPLES, APPLIED

This section showcases how Life's Principles are applied to different types of industries, and what the benefits are of doing so.

BIOMIMICRY LIFE'S PRINCIPLES

ONLINE SHORT COURSE

Course content - detail

SECTION 1: INTRODUCTION

Introduction to Life's Principles and other related concepts that form the basis of why we use these deep patterns and principles.

TITLE	IN THIS VIDEO WE COVER:
Introduction to Life's Principles	<ul style="list-style-type: none">• Life's Principles are explained through an example that illustrates their relevance.
Earth's Operating Conditions	<ul style="list-style-type: none">• An overview of the critical overarching operating conditions that all species on Earth, including ourselves, need to adapt to
Why Life's Principles	<ul style="list-style-type: none">• A background to the origin and relevance of Biomimicry Life's Principles.

BIOMIMICRY LIFE'S PRINCIPLES

ONLINE SHORT COURSE

Course content - detail

SECTION 2: LIFE'S PRINCIPLES, IN DEPTH

A deeper look at each of the main categories and their sub-principles, using case studies and examples of each.

TITLE	IN THIS VIDEO WE COVER:
Overview of Life's Principles	<ul style="list-style-type: none">• This video provides an overview of the Life's Principles circle - explaining the 6 overarching principles, and the aspirational ideal of designing with them in mind.
Integrate Development with Growth	<ul style="list-style-type: none">• Understand the biological origin and design application, including sub-principles:<ul style="list-style-type: none">- Modular, nested & networked components- Build from the bottom up- Self-organise
Locally Attuned and Responsive	<ul style="list-style-type: none">• Understand the biological origin and design application, including sub-principles:<ul style="list-style-type: none">- Use feedback loops- Leverage cyclic processes- Cultivate cooperative relationships- Use readily available materials & energy

Continued on following page >

BIOMIMICRY LIFE'S PRINCIPLES

ONLINE SHORT COURSE

Course content - detail

SECTION 2: LIFE'S PRINCIPLES, IN DEPTH

< *Continued from previous page*

TITLE	IN THIS VIDEO WE COVER:
Adapt to Changing Conditions	<ul style="list-style-type: none">• Understand the biological origin and design application, including sub-principles:<ul style="list-style-type: none">- Incorporate diversity- Embody resilience: Variation, redundancy & distribution- Maintain integrity through self-renewal
Life-Friendly Chemistry	<ul style="list-style-type: none">• Understand the biological origin and design application, including sub-principles:<ul style="list-style-type: none">- Build selectively with a small subset of elements- Break down into benign constituents- Do chemistry in water
Be Resource efficient	<ul style="list-style-type: none">• Understand the biological origin and design application, including sub-principles:<ul style="list-style-type: none">- Fit form to function- Use multi-functional design- Use low energy processes- Recycle all materials

Continued on following page >

BIOMIMICRY LIFE'S PRINCIPLES

ONLINE SHORT COURSE

Course content - detail

SECTION 2: LIFE'S PRINCIPLES, IN DEPTH

< *Continued from previous page*

TITLE	IN THIS VIDEO WE COVER:
Evolve to Survive	<ul style="list-style-type: none">• Understand the biological origin and design application, including sub-principles:<ul style="list-style-type: none">- Replicate strategies that work- Reshuffle information- Integrate the unexpected

BIOMIMICRY LIFE'S PRINCIPLES

ONLINE SHORT COURSE

Course content - detail

SECTION 3: LIFE'S PRINCIPLES, APPLIED

This section showcases how Life's Principles are applied to different types of industries, and what the benefits are of doing so.

TITLE	IN THIS VIDEO WE COVER:
Life's Principles Applied	<ul style="list-style-type: none">• This section is an overview of how to apply Life's Principles in our designs. <p>The learning outcomes are to:</p> <ol style="list-style-type: none">1. Understand that Life's Principles can be used as a tool for:<ul style="list-style-type: none">- Sustainability & resilience planning- Design & innovation- Systems thinking2. Use Life's Principles as an evaluation checklist.3. Demonstrate how Life's Principles can be used as a brainstorming tool for innovation.4. Recognise Life's Principles as a powerful systems thinking tool.

BIOMIMICRY LIFE'S PRINCIPLES

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.

.....

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.



BIOMIMICRY LIFE'S PRINCIPLES

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