



Academic Calendar

Graduate Certificate in Biomimicry

- Essentials of Biomimicry
- Life's Principles
- Biology Taught Functionally
- Biomimicry Thinking
- Virtual Design Lab Practicum

	Jan 12–Mar 03			Mar 16– May 01			Jan 12–May 01			May 18–Jun 26			July 01–Aug 11			May 18–July 10			Aug 20–Oct 09			Oct 14–Dec 04			Aug 20–Dec 04			Jan 11–Mar 01			Mar 14–Apr 29			Jan 11–Apr 29			May 16–Jun 24			Jun 29–Aug 09			May 16–Jul 08			Aug 18–Oct 07			Oct 07–Dec 10			Aug 18–Dec 10		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C												
Essentials of Biomimicry		•				•	•	•		•	•							•	•	•																																		
Life's Principles									•																														•															
Biology Taught Functionally	•	—	•												•																																							
Biomimicry Thinking				•	—	•													•	—	•																																	
Virtual Design Lab Practicum															•				•	—	•																		•															
	SPRING			SUMMER			FALL			SPRING			SUMMER			FALL																																						
	2015									2016																																												

Fall/Spring Session A: first 7.5 week session
 Fall/Spring Session B: second 7.5 week session
 Fall/Spring Session C: full semester (15 weeks)

Summer Session A: first 6-week session
 Summer Session B: second 6-week session
 Summer Session C: 8 week session

(•—• Must take both sessions)

Required Courses (13 credits)

Essentials of Biomimicry	Life's Principles	Biology Taught Functionally	Biomimicry Thinking
<p>BMY 501 1 Credit</p> <p>The Essentials of Biomimicry is a one-quarter class (7.5 weeks) offered as introductory sampler to the various topics (discipline, emulate, ethos, (re)connect & iSites, human-nature connection, Biomimicry Thinking, and Life's Principles) within the discipline of biomimicry. Each week is devoted to a specific topic and is led by a different instructor. The course is intended to provide a basic overview of each aspect of the discipline with ample opportunity for conversation and dialogue around the specific components, with an understanding that greater depth into each topic can be learned by taking the advanced BMY courses.</p>	<p>BMY 502 4 Credits</p> <p>Life's Principles are nature's universal design guidelines based on 3.8 billion years of successful strategies across all life. With instruction by Dr. Dayna Baumeister, this 15-week course on-line takes participants on a deep dive of Life's Principles. It includes the review and study of life's operating conditions on Earth, the six primary principles, and their related sub-principles. This course gives participants the knowledge necessary to bring these design guidelines into practice and provides opportunity to integrate them into one's discipline.</p>	<p>BMY 503 4 Credits</p> <p>Biomimicry teaches biology through the lens of function, thereby providing a core understanding in biology for all students, no matter their background. This 15 week course explores how biologists gather and research information and how that knowledge can inform other disciplines. It also introduces the art of translating biological concepts into strategies for application, which is then carried throughout all the courses. You will learn how to work with biologists on a biomimicry team and how to weave biology and biomimicry together. You will learn to look at nature through the function lens, and how to identify subject matter experts needed for interdisciplinary teams.</p>	<p>BMY 504 4 Credits</p> <p>Biomimicry Thinking is the practice of biomimicry from a methodology-based approach. Led by Dr. Dayna Baumeister, this 15-week exploration into the Biomimicry methodology reviews how biology and biomimicry can be incorporated into the four major phases of any design process: scoping, discovering, creating, and evaluating. It introduces the art of translating biological concepts into strategies for application and building a taxonomy of design principles.</p>

Capstone Course (2 credits)

Biomimicry Virtual Design Lab

BMY 530 | 2 Credits

This practicum is designed to allow participants to dive deep into the biomimicry tools and resources presented during the program and to apply them selectively to a specific and unique opportunity of the student's choosing. Projects should have a meaningful outcome achievable within the semester, and should engage the scoping, discovering, creating and evaluating phases of Biomimicry Thinking. Deliverables are milestone based, and the final deliverable should have application in a real-world setting.