

Academic Calendar

Graduate Certificate in Biomimicry (BMY)

- 501 Essentials of Biomimicry
- 502 Life's Principles
- 503 Biology Taught Functionally
- 504 Biomimicry Thinking
- 530 Virtual Design Lab Practicum

	2020			2021			2022		
	A	B	C	A	B	C	A	B	C
501	•					•	•		
502			•—•			•—•			•—•
503			•			•			•
504									•
530		•	•—•		•	•—•		•	•—•
	SPRING			SUMMER			FALL		

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
 (•—• Enroll in Summer A; course dates span A + B)
Summer Session C: 8 week session

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.