

Schedule (subject to change)

ARCH 4/510 s17 BIOMIMICRY & PARAMETRIC DESIGN - CHENG nywc@uoregon.edu

Tues Thurs 12-2pm Denise in Hearth
Denise Blankenberger: dblanken@uoregon.edu

Week	Date	Room	Topic	Reading	Assignment Due
1.1	W 5-Apr	405LA	Biomimicry Intro, Resources	http://Toolbox.Biomimicry.org; Vincent: Biomimetic Patterns, Ball: Self-made Tapestry	
1.2	F 7-Apr	283M	GH Basics, 2D patterning		
2.1	W 12-Apr	405LA	Skins & Building Facades	Perez-Garcia Natural Structures, Aksamija: Sustainable Facades, Mazzolini: Architecture Follows Nature	1A Skin: Sketches, 2D parametric pattern.
2.2	F 14-Apr	283M	GH Paneling Tools, data structures		
3.1	W 19-Apr	405LA	Systems Thinking, Biomimetic Water systems	Daniel Kim's Intro to System's Thinking, Ju et. al. Cactus Fog Collection, Pawlyn's Biomimicry in Architecture	1B Skin: 3D Solar adjustable biomimetic module
3.2	F 21-Apr	283M	GH Ladybug: Climate & Solar Vis.		
4.1	W 26-Apr	405LA	Growth: Evo-Devo	Carroll's Endless Forms Most Beautiful Ch1-2, Radiolab Emergence podcast, De Landa on Genetic Algorithms & Architecture video	1C Skin: Solar Responsive Surface
4.2	F 28-Apr	283M	GH Ladybug & Honeybee: Lighting		
5.1	W 3-May	405LA	Growth: Algorithmic architecture	Milos Dimcic Coding Evolution; Burry's New Mathematics of Architecture: Glossary	2A Dynamic System study, > Final Project Prisinterm
5.2	F 5-May	283M	GH Galapagos, functions, graph mapper		
6.1	W 10-May	405LA	Bones, Carapaces & dynamic structures	Turner's Bones, Vincent's Deployable Structures, Vogel's Cat's Paws and Catapults (Ch.3-5)	2B Dynamic System design > Final Project Definition
6.2	F 12-May	283M	Kangaroo Structural simulation		
7.1	W 17-May	405LA	Research Presentations	Gruber's Biomimetics in Architecture, Neal Panchuk's Uwaterloo Thesis	3A Final Project Research
7.2	F 19-May	283M	Research Presentations, project work		
8.1	W 24-May	405LA	Digital Fabrication	Iwamoto's Digital Fabrication	3B Conceptual sketches, Plan
8.2	F 26-Jan	283M	Help Session (Cheng away)		
9.1	W 31-May	405LA	Work-in Project updates	Brownell's Hypernatural	3C Design development
9.2	F 2-Jun	283M	Project Development		
10	6-9 Jun	477C LA	Each team schedules an appointment in lieu of class during week 10		3D Draft Presentation
11	M 12-Jun	TBA	FINAL REVIEW 10:15am-12:30pm		3E Final Report presentation