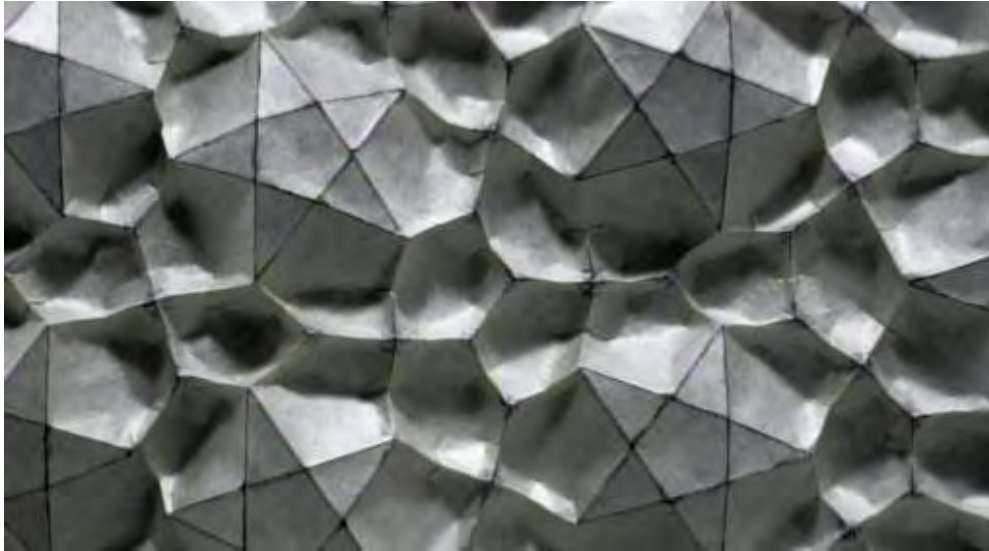


# Inquiry into Design Computing

Architecture 497.004

Fall 2018



**Image from *Between the Folds* a film about origami by Vanessa Gould**

[<http://scienceblogs.com/bioephemera/wp-content/blogs.dir/263/files/2012/04/i-bcf9047432111a2f6e3ee6ce17514944-BtwtheFolds2.jpg>]

Prerequisites: None

Schedule: Tuesdays 10:10AM-1:10PM

Room: TBA

Instructor: Assistant Professor Felecia Davis

Office: 418 Stuckeman Family Building

Email: fadav@psu.edu

Office Hours: By appointment

Teaching Assistant: TBA

The course provides an opportunity for students to explore the multiplicity of theoretical perspectives and practices in which designers use computation. It is an introduction into the interests and research ongoing in the Design and Computation cluster in the School of Architecture and Landscape Architecture. Design processes will anchor explorations in understanding, sensing, reflection, communication, representation, and computing. Topics will expose students to key design computational paradigms such as shape grammars and rule based design, parametric practices, spatial syntax, pattern language, simulation and modeling, systems theory, intelligent and augmented spaces, digital fabrication, and computational materials. In this course, students will look at computation done by hand and computation done by machines with the emphasis on understanding computation broadly through theories of the body, historical, political and social developments which shape how computation has been engaged in design today. Thus, offering students the opportunity to consider computation processes, concepts and theories apart from specific tools and technical skills.

**Note:** This is a required subject for first year Post Professional and PhD students in the Design and Computation cluster in the School of Architecture and Landscape Architecture. However, it is open to interested students from other areas and departments, depending on enrollment numbers and with permission of the instructor.