university of oregon – school of architecture and allied arts – department of architecture Arch4/586 Advanced Architectural Design II – Cheng Thriving through Making Studio

## Week 4: Facades

April 18-22, 2016

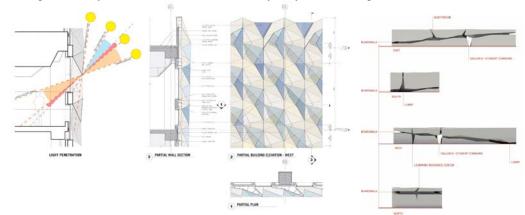
## Week 4 Agenda

After considering the interior bones and respiratory system of the building, our attention turns towards the skin. The outermost layer of a building serves as the first line of defense against environmental forces while carrying a great expressive potential. For a building to communicates its role within the natural and urban systems, it needs to have the following:

- 1) Vocabulary elements: building blocks, frames, openings and surfaces.
- 2) Standard assemblies or chunks
- 3) An overall compositional strategy: proportions of light and shadow, massiveness and lightness, datum and accent colors or materials.

## For Friday, April 22:

- 3D sketches or images of standard assemblies with materials portrayed.
- At least four major Facade drawings 1/8"=1'-0" or mininum 17" long.
- Section showing how facade plays a role in natural ventilation and daylighting Start large-scale bay model for Midterm on Monday May 2: 1/4" or larger



Kuwait University College of Education: <a href="http://www.raftarchitects.com/kuwait-university-college-of-education">http://www.raftarchitects.com/kuwait-university-college-of-education</a> Fixed folded plane facade is tuned to minimize heat gain and maximize usable natural light. The facade wraps an expressive form whose perimeter communicates a split mass. Designed by Perkins and Will, lead by Anthony Fieldman, now of RAFT Architects. See more about the process in Ajia Aksimija's Sustainable Facades: Design Methods for High-Performance Building Envelopes book, 2013.

SmartGeometry: http://www.smartgeometry.org/workshop

Craft and Computation meetup features architectural research projects around the theme of Hybrid Domains.

Harvard Self-Organizing Systems Research Lab: <a href="https://www.youtube.com/user/ssrlab0">https://www.youtube.com/user/ssrlab0</a>
Includes Robotic Collective Construction: Termite Inspired Facades by members from the Wyss Institute and the Engineering and Applied Sciences

Construction Time-lapse of Petersen Automotive Museum in Los Angeles. <a href="https://www.youtube.com/watch?v=yu-8GB3bIho">https://www.youtube.com/watch?v=yu-8GB3bIho</a>

Designed by Kohn Pedersen Fox, the exterior metal systems were design-engineered and fabricated by A. Zahner Company