



National University of Sciences and Technology

School of Art, Design and Architecture

ARCH-483 Elective (Art Workshop II)

Credit Hours:	1-1	Semester:	Fall
Instructor:		Office:	
Email:		Extension:	
Website:			
Counseling Hours:			
Research Assistant:		Office:	
Email:		Extension:	
Website:			
Pre-requisites:	None		
Course Description:	<p>The course is a series of 12 sessions including lectures and tutorial-workshops through which the foundation skill-base for an integrated digital-material fabrication methodology is established. On an iterative cycle these techniques are learned and applied to the formation of an individual digitally-derived material spatial speculation. This proposal is formulated through a sequence of 4 iterations of increasing sophistication. The final iteration is to be a fully articulated and documented proposition that exists as:</p> <ul style="list-style-type: none"> - a digital tool and representation - a physical piece manufactured in the workshop - a paper documentation of the process, the proposition, and its applicability (the individual Design Dossier). <p>The weekly teaching day is divided into digital tool tuition and/or presentations/lectures about relevant design projects in the first hour and followed by two hours of tutorial/design session. Parametric tool tuition is in Rhino and Grasshopper. Emphasis will be given on illustrating/teaching how the tools can be used to create 'real-life', built contrast to speculative parametric explorations.</p> <p>The project theme will focus on the idea of creating volume as a three-dimensional, continuous and fully enclosed construct. The final pieces must enclose a full volume and could be made out of fibers/weaving/bundling/layering and/or patterning/component stacking/aggregating/interlocking elements. As well as designed the enclosing system, control over the interior spatial configuration must be demonstrated, and analyzed in terms of the implications for inhabitation. The construct must be made using the available workshop facilities of the school. The final prototype shell formations can result from the aforementioned fabrication techniques themselves or from predefined shapes/molds that relates to site/environment parameters. Students are to identify one or more specific theme(s), relating to dwelling architecture, to explore which could include for example: porosity, layering, perforation, patterning, light penetration,</p>		

structural performance, wind flow/ventilation etc. There should be at least three prototypes developed before the final large (furniture scale) construct. The final pieces will be used as incubators of ideas and themes that can be carried through, researched thoroughly and subsequently applied in practice.