Kennesaw State University | College of Architecture + Construction Management | Department of Architecture

ARCH 4895: COMPUTATIONAL METHODS 3 credit hours
Advanced Generative-Analytical Technologies in Architecture
Prof. Arash Soleimani, PhD
Email: asoleim1@kennesaw.edu
Office: Bldg. N, Room 162

CLASS SCHEDULE

Week 01
Introduction
LEC1: Computational Thinking and Thinking about Computing

Week 02
LAB: GH Intro + Math Operations & Data Sets
LEC2: Intro, Formation, Transformation, Variational Evolution
(10-49)

Week 03
LAB: Math Operations & Data Sets
LEC3: General System, Systems Generating Systems, Cybernetics, Human thru Machines
(50-85)

Week 04
LAB: Parametric Patterns
LEC4: Research Topics Introduction

Week 05
LAB: Parametric Patterns | One-page Abstracts Due
LEC5: A New Agenda for Computer-Aided Design & Algorithmic Form, Practical Computing
(86-119)

Week 06
LAB: Parametric Spaces | Midterm Exam
LEC6: Morphogenesis & Mathematics of Emergence, Philosophy of Mathematics for Design
(158-178)

Week 07
LAB: Parametric Spaces
Proposal Presentations

Week 08
LAB: Morphology & Deformation
LAB: NURBS Surfaces

Week 09
LAB: Meshes
LAB: GHPython Scripting

Week 10
LAB: GHPython Scripting
Final Project Due