The Arthur Loeb Design Science Collection comprises hundreds of polyhedra and 2-dimensional patterns that complement one's view of the natural world. The collection is intended for hands-on investigation by faculty, students and alumni. Through handling the models, examining the patterns and comparing them to natural specimens one can learn, first-hand, the underlying formal and structural relationships inherent in our material world.

In 2003, The Nature Lab accepted this remarkable collection as a gift from Mrs. Charlotte Loeb, the widow of Dr. Loeb. Arthur L. Loeb taught for more than 20 years in the Department of Visual and Environmental Studies at Harvard University. He was instrumental in developing a language for the storage, communication and retrieval of spatial concepts and patterns.

With support from graduate assistantship program at RISD, graduate students assist in curating the collection. Many items are intricately designed and finely crafted and demonstrate the basic, formal building blocks of the natural world. You may examine the collection by appointment. Call Katy Dika or Rachel Atlas, Assistant Curators by calling 401-454-4951 or e-mail: nature@risd.edu

The Design Science Teaching Collection affords an opportunity for RISD faculty and students to explore a fundamental approach to design through understanding geometric principles. These principles apply across the art and design disciplines: textiles, architecture, sculpture, industrial design, to name a few.

Design Science: An Exploration of Geometric Form is offered in Wintersession as an interdisciplinary 3 credit course. The course begins with what the students know and leads them toward experiencing something new about spatial relationships and structure. The students collaborate to build a common language and a foundation of experience, through discussion and model making that express their discoveries. The students' questions lead the way toward new explorations.

In this hands-on approach to geometry, students learn mathematical concepts through visual, tactile and kinetic investigations of a broad range of polyhedra. Where appropriate, mathematical problem solving and the use of formulae enrich the experience. The course emphasizes an integrated approach to design questions by using visual and geometric, as well as intuitive and analytic, approaches to solutions. Students of design science often remark that the course teaches them to think and solve problems in entirely new ways.