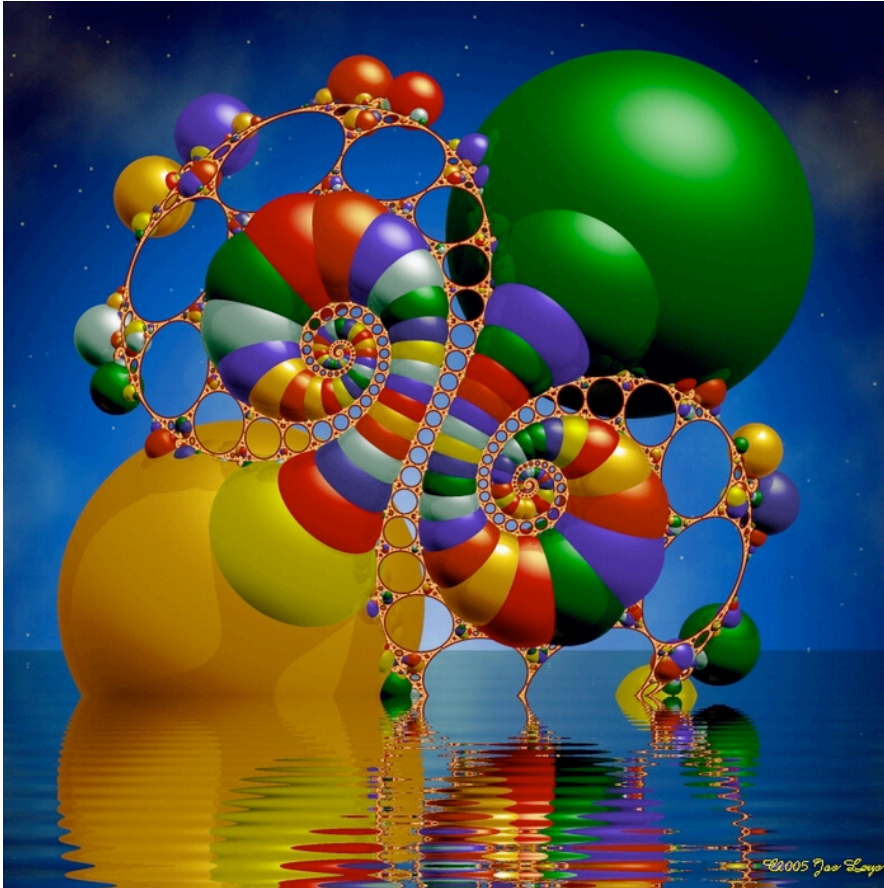# 054/136.102
Math In Art

Slot 4, 8:30 - 9:50 AM
Tuesdays & Thursdays
205 Armes, Machray Hall.

Instructors
Dr. S. Kalajdzievski, Mathematics
Professor _____, School of Art

MATH IN ART is a marriage between mathematics, the most abstract science, and fine arts (i.e. drawing, painting, ceramics, sculpture, architecture). In a sense, all visual arts are math arts, since they all exhibit symmetry, patterns, colour and dimension in varying degrees. In this course we will study visual (or artistic) aspects of math, as well as some math related aspects of fine arts. The main themes of study include: golden mean, golden rectangles, Fibonacci spirals, symmetries and other organizing principles, frieze patterns, wall paper groups, tilings & tessellations, string art and conics, perspective drawing, Platonic solids and regular polyhedra, Escher-style hyperbolic art, nature/mathematics as a fractal artist and various topological objects.

Goal: To allow the students to see how mathematics can transform the universal order we see around us into natural aesthetic so that they can be faithfully reproduced as art. To show them how "beauty" can be quantified or generated. To demonstrate the visual beauty of mathematics and the mathematical undercurrents in visual arts.

Scheme of Evaluation
One art project/assignment (format, deadline to be determined by Professor _____)   25%
One Mid-Term Exam (to be set by Dr. S. Kalajdzievski)   25%
One art assignment/project (to be determined by Professor _____)   15%
Final Exam in December (2 hours, covers all topics, SK)   35%
Total   100%