

36.102/054.102 Mathematics in Art, September - December 2003
tentative schedule of topics/tests etc.

Dr. S. Kalajdzievski, Mathematics (357 Machray Hall, sasho@cc.umanitoba.ca,
<http://server.maths.umanitoba.ca/homepages/sasho/courses/MathInArt/MathInArt.html>)
 Professor Treble Lysenko, School of Art, Fitzgerald Building Room 403A

Week	Day #	Topic	Professor
pt 4	1	Why math for art - course overview; then Euclidean geometry part 1	S.K. (Kalajdzievski)
pt 9	2	Why math for art – Abstraction Qualities in Art	T. L. (Lysenko)
pt 11	3	Euclidean geometry and constructions	S. K.
pt 16	4	Golden ratio	S. K.
pt 18	5	Ordering Principals in Art: Proportion and Meaning	T. L. Issue Project-1
pt 23	6	Fibonacci sequence, spiral constructions	S. K.
pt 25	7	Plane symmetries	S. K.
pt 30	8	Ordering Principals in Art: Symmetry and other compositional systems	T. L.
pt 2	9	Frieze patterns/tilings/wall-paper groups	S. K.
pt 7	10	Similarities, then Fractals part 1	S. K.
pt 9	11	Order and chaos in Art and Design	T. L. Project-1 Due
pt 14	12	Problem solving (for mid-term exam)	S. K.
pt 16	13	Written mid-term test	
pt 21	14	Fractals part 2, then Classical perspective: basic rules (1)	S. K. Issue Project#2
pt 23	15	Classical perspective: basic rules (2) Polyhedra	S. K.
pt 28	16	Delineation Methods; Sign, Narrative, Perspective	T. L.
pt 30	17	The Cone; Conic sections	S. K.
pt 4	18	Polyhedra; Platonic Solids in fine arts	T. L.
pt 6	19	Hyperbolic geometry 1	S. K.
pt 11	20	Conics in art and design	T. L.
pt 13	21	Hyperbolic geometry 2, Topology part 1	S. K.
pt 18	22	Topology part 2	S. K.
pt 20	23	Topological transformations in art and design	T. L. Project#2 Due
pt 25	24	Course summary (only for 40 minutes)	S. K.
	24	course evaluation (for 30 minutes)	by students
pt 27	25	Sample problems (for Final Exam) - how to solve	S. K.
pt 2	26	Topology in design; Course summary	T. L.
pt ??	27	Final Exam (to be scheduled by the Administration) U of M.	

Summary of Evaluation

Final art project/assignment (format and deadline to be determined, T. Lysenko)	25%
Final Mid-Term Exam (S. Kalajdzievski)	25%
Final art assignment/project (T. Lysenko)	15%
Final Exam in December (2 hours, covers all topics, S.Kalajdzievski)	35%