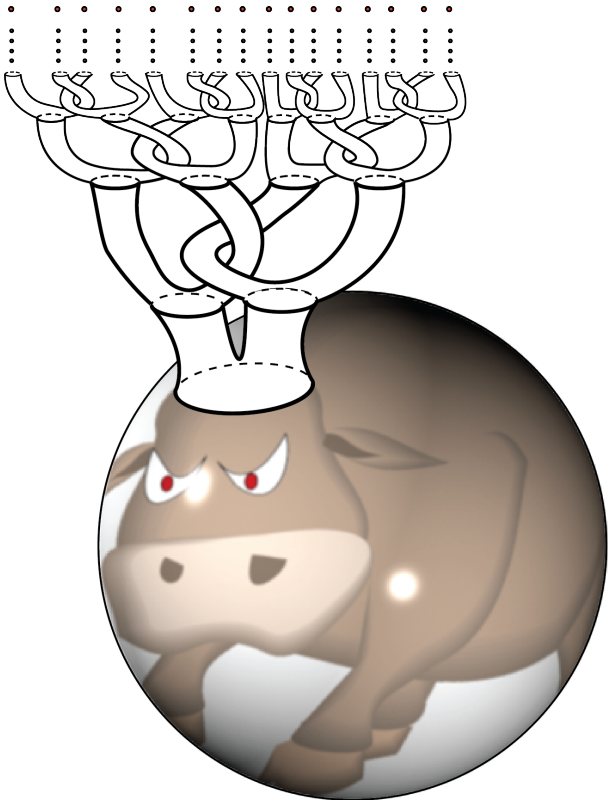
Math 1020/FA 1020
Math In Art A02

11:30 - 12:45 AM
Tuesdays & Thursdays
136 Art Lab

Instructors
Sasho Kalajdzievski, Math Part
Derek Brueckner, Art Part



Textbook: ***Math and Art: An Introduction to Visual Mathematics*** by Sasho Kalajdzievski and R. Padmanabhan. [**Note:** the royalties for the books sold in the U of M bookstore go back to students through scholarship funds.]

The main themes of study include: golden mean, golden rectangles, Fibonacci spirals, symmetries and other organizing principles, frieze patterns, wall paper groups, tilings & tessellations, fractals, string art and conics, perspective drawing, Platonic solids and regular polyhedra, Escher-style hyperbolic art, and isotopy and homotopy of topological objects. Goal:

Scheme of Evaluation: Art Projects 40%, Midterm Exam, one hour 25%, Final Exam, two hours, April, date and place to be announced later, 35%.

Important dates: **Mid-term Break:** February 18-22. **Last day for voluntary withdrawal:** March 20, 2013**.**

The Faculty of Science and The University of Manitoba regard acts of academic dishonesty in quizzes, tests, examinations, laboratory reports or assignments as serious offences and may assess a variety of penalties depending on the nature of the offence. See http://umanitoba.ca/admin/governance/governing_documents/students/868.htm for details.

MATH 1020 is not available to any student already holding a grade of "C" or better in any mathematics course with the exception of MATH 1010 or MATH 1190 or MATH 1191 (136.119). Not to be taken concurrently with any other mathematics courses with the exception of MATH 1010 or MATH 1190 or MATH 1191.

	A	B	C	D
1	Day	**MATH 1020 FA1020, A02, Winter 2013**	Math	Art
2		A **tentative** schedule of topics/dates	SK	DB
3				
4	1	A course overview; Euclidean Constructions(1)	8-Jan	
5	2	Art Lecture		10-Jan
6	3	Euclidean Constructions (2); Golden Ratio (1)	15-Jan	
7	4	Golden: Rectangles Triangles, Spirals,; Fibonacci Sequence (1)	17-Jan	
8	5	Art Lecture		22-Jan
9	6	Fibonacci Sequence (2); Symmetries (1)	24-Jan	
10	7	Symmetries (2); Groups of Symmetries	29-Jan	
11	8	Art Lecture		31-Jan
12	9	Friezes, Tilings; Fractals (1)	5-Feb	
13	10	Fractals (2)	7-Feb	
14	11	Art Lecture		12-Feb
15	12	Fractals; Midterm Review	14-Feb	
16		**Spring Break**		
17		**Mid-Term Exam written on February 25 (Monday), at 5:30**		
18	13	Art Lecture		26-Feb
19	14	Perspective	28-Feb	
20	15	Art Lecture		5-Mar
21	16	Conic Constructions; Platonic Solids (1)	7-Mar	
22	17	Platonics	12-Mar	
23	18	Art Lecture		14-Mar
24	19	Hyperbolic Geometry (1)	19-Mar	
25	20	Hyperbolic Geometry (2)	21-Mar	
26	21	Art Lecture		26-Mar
27	22	Topology (1)	28-Mar	
28	23	Art Lecture		2-Apr
29	24	Topology (2)	04-Apr	
30	25	Course Summary (JP 15), Final exam review (SK 60)	9-Apr	9-Apr
31				
32		Final Exam (dates to be determined by U of M)		
33				
34		Art Assignments = 40		
35		Mid-Term + Final Exam 25 + 35 = 60		
36		SK = Sasho Kalajdzievski ; DB=Derek Brueckner		