

# Math 1020/FA 1020

## Math In Art

11:30 - 12:45  
Tuesday & Thursday  
136 Art Lab

Instructors:  
Michelle Davidson, Math Part  
Derek Brueckner , Art Part



**Textbook:** *Math and Art: An Introduction to Visual Mathematics* by Sasho Kalajdzievski and R. Padmanabhan. [Note: all of 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.

Scheme of Evaluation:

Art projects (format, deadline to be determined by Art Instructor)	40%
One Mid-Term Exam (to be set by 1020 Math instructors)	25%
Final Exam in December (2 hours, covers all topics, scheduled by registrar )	35%
Total	100%

**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.**