

Four Tales of Impossibility

**Thursday, October 19, 11:30 a.m.
Glatfelter 204**

Dr. David Richeson

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"Nothing is impossible!" It is comforting to believe this greeting card sentiment; it is the American dream. Yet there are impossible things, and it is possible to prove that they are so. In this talk we will look at some of the most famous impossibility theorems — the so-called "problems of antiquity." The ancient Greek geometers and future generations of mathematicians tried and failed to square circles, trisect angles, double cubes, and construct regular polygons using only a compass and straightedge. It took two thousand years to prove conclusively that all four of these are mathematically impossible.

Dr. Richeson's research involves the study of dynamical systems from a topological viewpoint, the history of mathematics (especially the history of geometry and topology), and recreational mathematics. He is interested in promoting expository mathematical writing.