UPE Brown Bag on February 18, 1998

Topic: The Art and Mathematics of Geometric Dissections

Speaker: Prof. Greg N. Frederickson

When: Wednesday, Feb 18 at 12:30pm

Where: Room CS 111

This talk will be an introduction to the subject of my recently published book, "Dissections: Plane & Fancy". Geometric dissection is the mathematical art of cutting figures into pieces that can be rearranged to form other figures, using as few pieces as possible. Each dissection problem can be viewed as a puzzle, and many, such as the dissection of a regular octagon to a square, have elegant solutions. I will survey a representative variety of dissections and explain carefully the solution methods, including strips, steps, tessellations, and an exploration of star and polygon structures. In addition, I will discuss the colorful history of these problems, which originated many centuries ago and have flourished ever since their appearance in the mathematical puzzle columns of turn-of-the-century newspapers. Only a basic knowledge of high school geometry will be assumed.

Back to Brown Bags