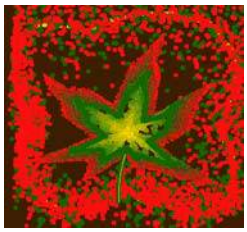
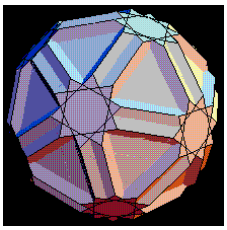
Southern Oregon University Math Department Proudly Announces



The 2001 Harry S. Kieval Lectures



Dr. Mark J. Nielsen

Department of Mathematics, University of Idaho

"Some Interesting Problems in Combinatorial Geometry"

Jan 19th (Friday), 9 AM

CH 230 Mulkey Auditorium

Suppose that you are given a set of n points in the plane (where n is some positive integer), and that no three of these points lie on a common line. You are allowed to form patterns by drawing segments between pairs of these points. How large would n have to be before you are guaranteed of being able to draw four segments that form a "tic-tac-toe" grid? We'll discuss this and other similar problems in the field known as combinatorial geometry.

"Geometry Lives On! Some interesting unsolved problems"

Jan 19th (Friday), 3 PM, SC 118

Geometry is arguably the oldest branch of mathematics. But "old" is very different from "dry" or "dead". We'll make the case that geometry is alive, well, and exciting by surveying a selection of problems that, while very easy to state, are unsolved even today.

Bibliography of Dr. Nielsen:

Dr. Nielsen has been at the University of Idaho for 10 years. His doctorate is in mathematics from the University of Washington (1990). His research interests are mostly in discrete geometry. Mark's current interests include colorings of the plane, inscribing figures in curves, and combinatorial problems involving segments determined by finite planar sets. Mark has also established the Internet Math Challenge. This involves a weekly math problem posted on the University of Idaho Mathematics Department web site intended for pre-college students. This has been a great success and is used by students and classroom teachers from all over the United States.