## Math 4990 Problem Set 6

Due Tuesday, Oct 20, 2015 in class

Please refer to previous problem sets for instructions, including but not limited to the collaboration policy.

## Erratum

p.65, Unsolved Problem 11, "exponential number of triangles triangulations"

## Assignment

Liberally peruse pages 59-65 of [DO].
[DO] Exercises 3.2, 3.3, 3.4, and 3.7.

Problem 5. Let $S \subset \mathbb{R}^{2}$ be a finite set of points in the plane such that every three of them can be covered by a circular disc of radius $r$. Show that $S$ can be covered by a circular disc of radius $r$.

Problem 6. Prove that a polygon of perimeter $p$ can be covered by a circular disc of diameter $p / 2$.

