

# Math 366 : Geometry Spring 2013

**Instructor** : Prof. Andrew Putman

**Office** : HBH 432

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**Webpage** : <http://www.math.rice.edu/~andyp/teaching/Math356/>

**Class Hours** : MWF 10:00-11:50

**Classroom** : TBA

**Office Hours** : TTh 11:00-12:00, also by appointment

**Text** : *Lectures on Discrete and Polyhedral Geometry* by Igor Pak, available online at <http://www.math.ucla.edu/~pak/book.htm>

**Prerequisites** : A small amount of linear algebra (certainly Math 221-222 would suffice, and probably Math 211 would be enough) and some experience with proofs. Talk to me if you are unsure if you know enough.

**Course description.** This course aims to cover some basic topics in *discrete/combinatorial geometry*. This is a somewhat loosely defined area that includes the study of objects like polyhedra and convex sets. The book we'll use (available for free on the web; see above) contains a huge amount of material at a variety of levels (from completely elementary to graduate level). We'll stick with topics that can be covered with no technology aside from the rudiments of linear algebra in  $\mathbb{R}^n$  and a good dose of geometric cleverness.

**Homework** : Homework will be assigned every Monday and will be due the following Monday. It will be posted to the course webpage by Monday evening. Collaboration is encouraged, but each student must independently write up his/her own solutions. Late homework is never accepted, but the lowest homework grade is dropped.

**Exams** : There will be one midterm exam and one final exam. The date of the midterm will be announced the second week of classes.

**Grading** :

50% Homework

20% Midterm

30% Final

**Disability support** : Any student with a documented disability seeking academic adjustments or accommodations is requested to speak with me during the first two weeks of class. All such discussions will remain as confidential as possible. Students with disabilities will need to also contact Disability Support Services in the Allen Center.