Instructor.
Federico Ardila
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Meetings.
bog. LMV 1:00-2:00. Z-102.
sf. MWF 12:10-1:00. Thornton 211.

Office hours.
Mondays 2:00-4:00 in Thornton 927.

Course website.
http://math.sfsu.edu/federico/cca.html
You are expected to visit this website often, and participate actively on the online discussion forum, which will be a very useful source of projects. On the website you will find, among others:
• the homework assignments,
• some suggested final projects,
• the lecture notes,
• links to the lecture videos, and
• a link to the online discussion forum.

Textbook.
There is no required book; I will post lecture notes online. The following books would be useful but none are required. Miller-Sturmfels is the most relevant reference.
• Bruns and Herzog. Cohen-Macaulay rings.
• Cox, Little, and O’Shea. Ideals, varieties, and algorithms.
• Dummit and Foote. Abstract algebra.
• Hibi. Algebraic combinatorics on convex polytopes.
• Miller and Sturmfels. Combinatorial commutative algebra.
• Stanley. Combinatorics and commutative algebra.
• Sturmfels. Gröbner bases and convex polytopes.

Prerequisites.
Modern Algebra 2 (SFSU) / Algebra Abstracta 2 (Los Andes).

Grading.
50%: Homework, tentatively due by e-mail on 2/4, 2/18, 3/4, 3/18, 4/3. LaTeX preferable.
10%: Light homework, tentatively due by e-mail on 4/8, 4/22, 4/29, 5/6, 5/13. LaTeX preferable.
10%: Project proposal, due on 4/15. LaTeX mandatory.
30%: Final project in pairs, due on 5/20. LaTeX mandatory.
10%: Possible incentive for active and valuable participation in the online discussion board.
10%: Incentive for projects by a Bogotá and a San Francisco student.