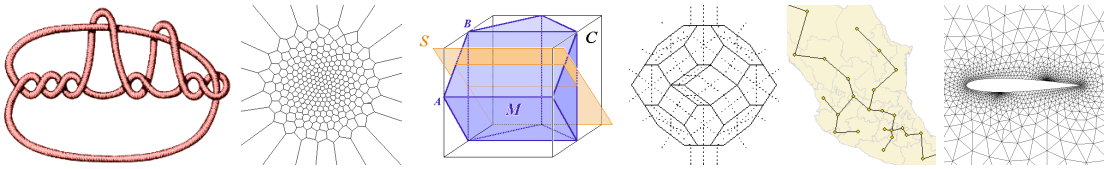

matroid theory

federico ardila

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Instructor.
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Meetings.
.bog. Mondays, Wednesdays, Fridays 4:10-5:00. Q 305.
.sf. Mondays, Wednesdays, Fridays 12:10-1:00. Thornton 211.

Office hours.

Course website.
http://math.sfsu.edu/federico/matroids.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.
We won't follow any book directly. I will post lecture notes on the course website. None of the following books are required, but parts of them may be useful (roughly in order of relevance):
• J. Oxley. *Matroid theory.*
• R. J. Wilson. An introduction to matroid theory. *Amer. Math. Monthly* **80** (1973), 500–525.
• R. Stanley. *An introduction to hyperplane arrangements.* At www-math.mit.edu/∼rstan/arr.html.
• A. Björner et. al. *Oriented matroids.*

Prerequisites.
You must be prepared to devote at least 10 hours a week on this class. You also need:
• Math 325 (SFSU) or Algebra Lineal 2 (Andes) or equivalent, and
• Math 301 (SFSU) or Math 330 (SFSU) or Matemática Estructural (Andes) or equivalent.

Grading.
There will be five homework assignments (tentatively due on 2/2, 2/16, 3/2, 3/16, and 3/28) and a final project in pairs (tentatively due on 5/16). Your final grade will be determined as follows:
.bog. 30% homework , 40% project , 15% exam 1 , 15% exam 2.
.sf. 50% homework , 50% project.
extra 10% for active participation in online forum , 10% for projects by a .bog. and an .sf. student.