

MATH 351: RIEMANN SURFACES AND DESSINS D'ENFANTS

SPRING 2013

JOHN VOIGHT

COURSE INFO

- **Lectures:** Monday, Wednesday, Friday, 10:40–11:30 a.m.
- **Dates:** 14 January 2013–1 May 2013
- **Room:** Votey 223
- **Course Record Number (CRN):** 12965
- **Instructor:** John Voight
- **Office:** 16 Colchester Ave, Room 207C
- **Phone:** (802) 656-2271
- **E-mail:** jvoight@gmail.com
- **Instructor's Office Hours:** By appointment
- **Course Web Page:** <http://www.cems.uvm.edu/~jvoight/351/>
- **Prerequisites:** Math (241, 242, and) 333, Math (251 and) 252, Math 331 (corequisite is OK), or permission. This may sound like a long list, but to get permission, all you need is some advanced coursework and a healthy dose of curiosity!
- **Required Texts:** Ernesto Girondo and Gabino Gonzalez-Diez, *Introduction to Compact Riemann Surfaces and Dessins d'Enfants*, 2012
- **Grading:** Homework will count for 35% of the grade. A final project will count for 65% of the grade.

HOMEWORK

The homework assignments will be assigned on a varying basis and will be posted on the course webpage. It will be due in one week, but late homework will be accepted.

Cooperation on homework is permitted (and encouraged), but if you work together, do not take any paper away with you—in other words, you can share your thoughts (say on a blackboard), but you have to walk away with only your understanding. In particular, write the solution up on your own. Please write on your assignment the names of any other collaborators you worked with.

ACCOMMODATION

Appropriate and fair accommodations will be provided for students with documented special needs; please contact the ACCESS office (<http://www.uvm.edu/~access/>) directly and early in the semester.

Students have the right to practice the religion of their choice. Each semester students should submit in writing by the end of the second full week of classes their documented religious holiday schedule for the semester.

SYLLABUS

We will present the theory of three-point branched covers of the complex projective line and its connection with the geometry and arithmetic of algebraic curves defined over number fields.