

# Math 582e: Galois Cohomology

<http://wstein.org/edu/2010/582e/>

AT UNIVERSITY OF WASHINGTON  
MWF 12:30–1:20 IN PADELDFORD C401

**OFFICE HOURS: 4:30–6:00pm on Tuesdays**

Instructor: William Stein ([wstein@uw.edu](mailto:wstein@uw.edu))

## 1 Topics

Galois cohomology.

## 2 Prerequisites

The main prerequisites are abstract algebra and Galois theory. I will draw on examples from number theory.

## 3 Texts

The primary text is chapters 7–10 of Serre’s *Local Fields*. Tate’s article *Galois cohomology* and Atiyah-Wall’s article *Cohomology of Groups* are also highly relevant.

## 4 Evaluation

This is a special topics course. Each registered student will receive a grade of 4.0 no matter what.

### 4.1 Homework

There will be one homework assignment per week, and I will **very strongly encourage** you to do them all, since honestly doing these problems is the *only hope* you will have to actually learn the material. I will give you feedback on your solutions.

### 4.2 Project

There will be a project on something relevant to Galois cohomology that appeals to you. This project will be due **March 12 at 5pm**.

### 4.3 Exam

There will be no exams.

## 5 Office Hours

My office is Padelford C423, and my office hours are 4-6:30pm on Tuesdays. I also tend to go to lunch in McMahon Hall right after class.