

# 18.786 Algebraic Number Theory

## Spring 2008

This course is an introductory graduate-level course in Algebraic Number Theory.

**Text:** *Algebraic Number Fields (2nd ed.)*, G. Janusz, American Mathematical Society.

**Website:** [www-math.mit.edu/~mahlburg/teaching/08-18786.html](http://www-math.mit.edu/~mahlburg/teaching/08-18786.html)

The course website will contain the most up-to-date information about reading, homework assignments, and schedules. Please check it frequently!

**Instructor:** Karl Mahlburg

<b>Office:</b> Room 2-172	<b>E-mail:</b> <a href="mailto:mahlburg@math.mit.edu">mahlburg@math.mit.edu</a>
<b>Phone:</b> 253-4470	<b>Webpage:</b> <a href="http://www-math.mit.edu/~mahlburg">www-math.mit.edu/~mahlburg</a>

**Schedule:**

<b>Lectures</b>	TR 1:00	Room 2-102
<b>Office Hours</b>	W 1:30 (or appointment)	Room 2-172

**Grading:**

- Homework assignments are due on **Thursdays** at the beginning of class (1:00). You are encouraged to work in groups, but you must write up your own solutions. Some of the homeworks will have a heavy computational component, and you must learn how to use SAGE (or equivalent).
- Exams are take-home and open-everything (notes, books, problem sets, internet, etc.). However, you may **not** consult with any other person while you are working.
- You are expected to complete an independent Reading Project before the end of the term. The goal is for you to pick a course topic that you are interested in and learn enough about it to write a 5–8 page summary/survey. If the topic you pick involves computation, you can write some code and use that for your paper.

Grading Summary	Date	Points
<b>10 Problem Sets</b>	Due on most Thursdays	40 %
<b>Reading Project</b>	Due end of term	10 %
<b>Midterm</b>	Approx. Mar. 18 <sup>th</sup>	20 %
<b>Final Exam</b>	Approx. May 22 <sup>th</sup>	30 %