

MAT4143/MAT5142 – Topics in Algebra II

Course description:

Field theory, algebraic and transcendental extensions, finite fields, Galois groups.
Introduction to Module Theory. Modules over Principal Ideal Domains

Prerequisite: MAT4141/MAT 5141

Winter 2010

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Lectures: Mon 10:00-11:30, Wed 10:00-11:30 KED B015.

Office hours: Wed 11:30-12:30

Webpage: <http://www.mathstat.uottawa.ca/~kirill>

Text: Abstract algebra, by D. Dummit and R. Foote.

Grading scheme: Students must achieve an average grade of at least 50% in their assignments in order to pass the course.

Assignments 40%

Final exam 60%

Assignments:

- Bi-weekly assignments will be posted on the course webpage on Mondays. There will be 4 assignments. They will be weighted equally towards the final grade.
- Assignments will be collected at the beginning of classes on Mondays. Please note that late assignments will not be graded without an official medical note.

Course outline:

Week Sections

1 13.1-13.2

2 13.2, 13.4

3 13.4-13.5

4 13.6, 14.1

5 14.2

6 14.2-14.3

7 14.4-14.5

8 14.7

9 10.1-10.2

10 10.3-12.1

11 12.1, 12.3

12 12.3