

MATH 413: Applied Algebra Course Outline (2018-01)

Instructor

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office hours Tue 1 pm – 2 pm, Thu 11 am – 12:30 pm, or by drop-in or appointment

Course Topics

prerequisites MATH 312 or equivalent

useful background a solid course in algebra and some exposure to discrete math

topics finite fields and algebraic coding theory; also miscellaneous other topics, including long-period sequences, polynomial factoring, testing arrays, and cryptology

Resources

course webpage www.math.uvic.ca/courses/2018s/math413/a01/index.html.

textbook There is no official textbook, although our work will roughly follow §12 – 23 of

R. Lidl and G. Pilz, *Applied Abstract Algebra*, 2nd ed., Springer-Verlag, New York, 1997.

Course notes and other reference material can be found on our course webpage.

Evaluation and Grading

Five homework assignments will be given, about two weeks apart. Two term tests will be held in class on February 9 and March 27. A final exam will be scheduled during the regular exam period.

The relative weighting of these assessments toward the final grade is as follows.

Homework	$5 \times 7\% = 35\%$
Term tests	$2 \times 15\% = 30\%$
Final exam	35%

Percentage scores are converted to letter grades using the standard UVic grading table: web.uvic.ca/calendar2018-01/undergrad/info/regulations/grading.html.

Course policies

You will seldom need a calculator in this course. If you use one on a test or exam, it must be the standard Sharp EL-510R/RN/RNB.

Please submit homework before the start of class on its due date.

Late homework requires a note from a doctor or academic official. In the event of an excused delay of more than two days, homework can be submitted for feedback, but having credit substituted with the overall class grade on other work. A similar arrangement applies for an excused absence from one of the in-class tests. In any case, your final examination cannot count for more than 60% of your course grade. If you miss too much term work, you are advised to withdraw from the course since you may receive a grade of 'N'.

You are expected to be available for the final examination. In particular, do not book travel until your exam schedule is known. Absence from the final examination results in a grade of 'N'.

Discussing problems (including assigned homework problems) with classmates is a useful and mathematically healthy practice. However, when it comes time to finalize your solutions for submission, you must work independently and write solutions in your own words. You may NOT copy homework solutions from someone else's work.

Other important remarks and policies on topics such as attendance, academic integrity, and excused deferrals can be found on the Mathematics and Statistics course policies page. A link to this exists at the Mathematics and Statistics undergraduate information page: www.uvic.ca/science/math-statistics/current-students/undergraduate/.

Course experience survey

Near the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience. When it is time for you to complete the survey, you will receive an email inviting you to do so. Please be thinking about this important activity during the course.