MATH 413: Applied Algebra
Course Outline (2019-01)

Instructor

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office hours Mon 11 am - 12 noon, Tue 10:30 am- 12 noon; or drop-in or appointment

Course Topics

prerequisites MATH 212 or equivalent

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/2019s/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 Albebra*, 2nd ed., Springer-Verlag, New York, 1997.

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

Evaluation and Grading

Approximately 5 homework assignments will be given, roughly equally spaced. Two term tests will be held in class; the dates are Feb 13 and Mar 29. There will be a three hour final examination scheduled during the April 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 table:
https://web.uvic.ca/calendar2018-09/undergrad/info/regulations/grading.html.

Course policies

You will probably not need a calculator in this course. However, for the record, there is a department-wide standard calculator, available from the bookstore.

Please submit homework at 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. Do not book travel until your exam schedule is known. Absence from the final examination results in a grade of 'N'.

Discussing 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. Please do NOT re-post class materials online, including for instance posting our homework questions to an online forum.

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.