

MATH 245: ADVANCED LINEAR ALGEBRA

- Professor: Jason Bell
- Office: MC 5008
- Office hours: M 1:00–4:00
- Email: jpbell@uwaterloo.ca
- Text: *Linear Algebra*, 2nd edition by K. Hoffman and R. Kunze.
- Course website: <http://www.math.uwaterloo.ca/~jpbell/Math245F2018.html>

MATERIAL

Rational and Jordan forms, invariant factors, inner product spaces, unitary operators, normal operators, operators on inner product spaces, bilinear forms. (Depending on how the course goes, some topics may be omitted or some additional topics may be added.)

DETERMINATION OF GRADES

Grades will be determined from the following data:

- weekly assignments (20%);
- midterm, October 30, 4:30–6:30 pm (30%);
- final exam, date and location TBD (50%).

There will be a total of ten assignments that will be graded. Assignments will be done via Crowdmark and you must scan and upload them to the site before class on the Friday they are due. Your grade will be determined by averaging the grades from the best nine out of ten assignments. Hints for assignment questions will not be given either in or out of office hours, although help with concepts and definitions and non-assignment questions will be given. Assignments are to be handed in at the end of class on the day they are due. Late assignments will not be accepted. If the midterm is missed due to illness, a doctor's note must be provided; in this case, the weight of the midterm will be shifted to the final exam. If the final is missed, a note must be provided and the final will be made-up during the final exam for 245 in a later semester.