

Syllabus for MATH 2121: Linear Algebra (Fall 2022)

- Instructor: Eric MARBERG (emarberg@ust.hk)
Office: Room 3492 in Math Department, Lift 25-26
- TAs: T1AB: TONG Kam Hung (khtongad@ust.hk)
T1CD: ZHENG Cong (czhengae@ust.hk)
T2AB: XIONG Wei (wxiongae@ust.hk)
T2CD: HU Mingyun (mhuae@ust.hk)
- Lectures: (L1) Tuesdays and Thursdays 15:00 - 16:20 in LTD
(L2) Tuesdays and Thursdays 16:30 - 17:50 in LTD
- Website: <http://www.math.ust.hk/~emarberg/Math2121/>
There is also a course website on Canvas.
The Canvas website will be used to post grades and announcements.
- Textbook: Linear Algebra and its Applications by Lay, Lay, and McDonald, 6th Ed.
- Outline: This will be a first course in linear algebra, from an applied perspective.
The main topics covered will include solving linear systems of equations, vector spaces, matrices, linear mappings and matrix forms, inner products, orthogonality, eigenvalues and eigenvectors, and symmetric matrices.
No prior knowledge of matrix algebra is assumed.
- Grading: Online homework 5% (weekly assignments, weighted equally)
Offline homework 5% (weekly assignments, weighted equally)
Midterm 30%
Final examination 60%
- Homework: The homework for the course will have two parts: online and offline.

The online homework will consist of weekly problem sets accessible in WebWork.
The problems will cover all course content but are easier than exam questions.

Each week will come with a list of practice problems, which are similar to exam questions.
For the offline homework, you must solve any two practice problems from the current week.
- Extra credit: If you submit correct solutions to more practice problems, then you can earn extra credit.
You can earn up to 5% extra credit for your course grade in this way over the whole semester.