**MA1522 Linear Algebra for Computing (2024/2025 Semester 2)**

**Lecture Mode: E-hybrid. Weekly meeting time (@LT16):** Mon and Thur 10:00-12:00.

(Thursday’s lecture is a repeat of Monday’s)

**Lecturer:** Yang Yue Email: [matyangy@nus.edu.sg](mailto:matyangy@nus.edu.sg) Office: S17, #07-05 Tel: 6516 2490

**Assessment:**

* Lecture quizzes 20%, there are 37 online quizzes spread out through the online lectures. They will be graded by the Canvas system automatically.
* Final examination 50%---9:00 am, 26-Apr-2025 Saturday (Closed book with one A4 helpsheet).
* Three assignments 10% each, total 30%. No late submission accepted unless there are valid reasons.
* Assignment 1: Problems upload in Canvas on 10 February 2025.  Submit before 16 February 2025 23:59.
* Assignment 2: Problems upload in Canvas on 10 March 2025.  Submit before 16 March 2025 23:59.
* Assignment 3: Problems upload in Canvas on 31 March 2025.  Submit before 6 April 2025 23:59.

**Aims and objectives:**

From NUSMod: “This course is targeted at students from School of Computing. It introduces basic concepts in linear algebra that are routinely applied in computer science, in the context of the Euclidean spaces, and will develop basic skills in computing with vectors and matrices with and without using computational software (MATLAB). Students are expected to acquire computational facilities and geometric intuition about vectors and matrices. Major topics: Systems of linear equations, matrices, determinants, Euclidean spaces, linear combinations and linear span, subspaces, linear independence, bases and dimension, rank of a matrix, inner products, eigenvalues and eigenvectors, diagonalisation, linear transformations between Euclidean spaces, applications.”

**Main References:**

* Detailed lecture notes and videos will be provided on Canvas site.
* **Reference: David C. Lay, Steven R. Lay, Judi J. McDonald, *Linear Algebra and Its Applications*, 6th ed,** Pearson Education, 2022.

**Consultation booking**

* Lecturer is available for consultation on an ad-hoc basis. Prior appointment (via email) can be made for consultation/clarification of concepts.