Math 2350 Applied Linear Algebra and Differential Equations

Course outline Spring-2019

Course webpage

https://canvas.ust.hk/courses/22409

Important: switch on email notifications to receive announcements

Instructor

Prof. Yu Hu

Email: mahy@ust.hk Office: 3428, Lift 17/18

Office hours: by appointment

Lectures

L1: Tue, Thurs 3:00-4:20 Rm 1103, Acad Concourse

Tutorials and Teaching Assistant

TA: Xiaoli Lin Email: xlinaw@ust.hk T1B: Thus 1:00-1:50 G009B, CYT Bldg T1A: Fri 1:30-2:20 Rm 1511, Lift 27-28

Course Info

Credits: 3 units

Exclusions: MATH 2111, 2121, 2131, 2351, 2352, and PHYS 2124

Prerequisites: AL Pure Mathematics/AL Applied Mathematics; Or any of MATH 1014,

1020, 1024

Assessment Scheme

Exam duration: 2 hrs Assessing Course ILOs

Worksheets: 10% 1,2,3,4
Midterm: 40% 1,2,3,4
Final: 50% 1,2,3,4
See details of grading methods in the file "Grading"

Textbook and Resources

Lecture notes by Prof. J. Chasnov, available <u>online</u> and hard copies available from the Math office (Sindy Ting)

Supplement textbooks (optional):

Matrix Algebra for Engineers by Chasnov (Bookboon, free download)

Differential Equations with YouTube Examples by Chasnov (Bookboon, free download)

Linear Algebra and its Applications by David Lay (Reserved at Library)

Elementary Differential Equations and Boundary Value Problems by Boyce & DiPrima (Reserved at Library)

Learning Objectives

Upon successful completion of this course, students should

- 1. Understand the core ideas and concepts of linear algebra and ODEs
- 2. Solve and analyze linear algebra and ODE problems using rigorous methods
- 3. Demonstrate skills in reading, interpreting and communicating mathematics that is integrated in other disciplines and everyday life
- 4. Develop critical thinking and mathematical maturity for higher level studies