

MATH3270A ORDINARY DIFFERENTIAL EQUATIONS COURSE OUTLINE

1. GENERAL INFORMATION

- **Instructor:** Ziming Nikolas Ma
- **Course Webpage:** <http://www.math.cuhk.edu.hk/course/1819/math3270a>
- **Lecture Class:** T4-5 (12:30 - 14:15), LSB LT-4 ; H5 (13:30 - 14:15), LSB LT-4
- **Tutorial Class:** H4 (12:30 -13:15), LSB LT-4
- **Office hour:** By appointment
- **Textbook :** William E. Boyce and Richard C. DiPrima, Elementary differential equations and boundary value problems. 10th edition (International Student Version). Wiley
- **Teaching assistants:** Ms. Zhang, Rong and Mr. Yeung, Chin Ching

2. CONTENT:

- (1) **First order equations:** (2 weeks) Sections 2.1-2.2, Section 2.6, Section 2.8;
- (2) **Second order linear equations:** (3 weeks) Sections 3.1-3.6;
- (3) **Higher order linear equations:** (2 weeks) Sections 4.1-4.4;
- (4) **Systems of first order linear equations:** (3 weeks) Sections 7.1-7.9;
- (5) **Nonlinear equations and stability:** (2 weeks) Section 9.1-9.3, Section 9.6.

3. ASSESSMENT:

- (1) Homework (10%): 4-5 homework sets, one for each chapter;
- (2) Midterm (40%): 12:30 - 2:15 on 23rd October, 2018 in LSB LT4
- (3) Final (50%): TBA

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