

## MA 266 Ordinary Differential Equations (Spring 2018)

Instructor: **Dr. Moongyu Park**

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Office Hour: Wed, 3:30pm – 5:00pm, Thu 4:30 pm – 6:00 pm or by appointment

Course web page: <http://www.math.purdue.edu/~park633/MA266.html>

Matlab files, Project, Assignment sheet and Supplementary exercises

**Class Schedule:** MA 266 – 155: MWF 11:30 am – 12:20 pm in UNIV 117

**Textbook:** Elementary Differential Equations and Boundary Value Problems (10<sup>th</sup> Edition) by Boyce and DiPrima (Publisher: Wiley, ISBN: 9781118567029)

### Web Pages:

- (1) Web-Assign: <https://www.webassign.com> is the main Web-Assign web site, <https://www.webassign.net/purdue/login.html> is login site for Purdue students.
- (2) ODE software for Matlab: direction field (Chapter 1) <http://math.rice.edu/~dfield>

**Course Description** (Credit Hours: 3.00)

**Topics:** Chapter 1, 2, 3, 4, 6, 7 First order equations, second and n-th order linear equations, solution by Laplace transform, systems of linear equations.

It is preferable but not required to take MA 265 (Linear Algebra) either first or concurrently. This course is not open to students with credit in MA 262, 272, 360, 361, or 366. Typically this course is offered Fall Spring Summer.

**Course Grade:** Calculators will **not** be allowed in any tests and quizzes.

Web-Assign HW (60) + In-class HW (40) + Quiz (50) + Midterm exams (2\*100)  
+ Projects (50) + Final(200) = 600

**Homework (100):** The homework problems are from the material of the previous week. Homework must be readable and **must be stapled**. Illegible scribbles will receive no credit from the grader. For a homework problem done with Matlab you should hand in the printout of your Matlab session (or at least the relevant parts). You are encouraged to attempt all the questions and discuss with your classmates. However, the write-up must be of your own. **HW for Web-Assign online problems** should be submitted online by **Wednesday 11:00 pm**. *The Hand-grading problems* will be collected **every Friday in class**. **No late assignments will be accepted**. You can submit your HW earlier.

**Quizzes (50):** Quizzes will be given **every other Friday**. Most problems in quizzes will come from problems in previous HW and (or their variations). If you have a University-approved excuse, you can take **make-up quiz**.

**Midterm Exams (200):** There will be two mid-term exams on the date to be announced. If I am given a **University-approved excuse** you may take a make-up exam. The problems in the make-up exam will be **different** from the original problems. They could be **harder**. All work must be shown.

**Final Exam:** The Final Exam will be a two-hour comprehensive multiple choice exam given during the Final Exam Week (Apr 30 – May 5). The time and place will be announced in class. Since the final exams will be **multiple choice**, there will be **no partial credit**.

**Important Comments:** Class attendance is expected. Reading the sections in the textbook ahead of time is strongly recommended. Check the course webpage often. It contains important course-wide announcements instructor contact information, Assignment Sheet, Supplementary Problems, Computer Projects, and Matlab tutorials for `dfield8`, `eul`, `ode45`, and `pplane8`.

**Accommodations for students with disabilities:** If you have been certified by the Disability Resource Center (DRC) as eligible for academic adjustments on exams or quizzes see [www.math.purdue.edu/ada](http://www.math.purdue.edu/ada) for exam and quiz procedures for your mathematics course or go to **MATH 242** for paper copies.

**Campus Emergency Notice:** [www.math.purdue.edu/MA266](http://www.math.purdue.edu/MA266) or the course web-page