

MA 30300 Differential Equations and PDE (Fall 2023)

Instructor: **Dr. Moongyu Park**

Office: MATH 1026

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Office Hour: Tue (11:00am – 12:30pm), Thu (11:00am – 12:30pm) and by appointment

(**Zoom meeting:** <https://purdue-edu.zoom.us/j/4732980067> by appointment only)

Class Schedule:

Lecture (sec 755): MWF 11:30am – 12:20pm in **University Hall 119**

Lecture (sec 758): MWF 1:30pm – 2:20pm in **University Hall 101**

Lecture (sec 756): MWF 2:30pm – 3:20pm in **University Hall 103**

Textbook: **Differential Equations and Boundary Value Problems**, Pearson (6th Ed) by Edwards, Penney and Calvis. We will cover chapter 5, 6, 7, 9 and section 10.1.

Web Pages:

Brightspace: <https://purdue.brightspace.com/d21/login>

Dr. Park's personal webpage: <https://www.math.purdue.edu/~park633/MA303.html>

Course Description (Credit: 3.00): This is a second-semester course in differential equations. The main topics covered are **linear and nonlinear systems of differential equations, Laplace transform, and an introduction to Fourier series and partial differential equations**. Usually this course is offered Fall, Spring, Summer.

Course Grade: **Online HW (30%) + Hand-graded HW (10%) + two midterm exams (2*15%) + Final (30%) = 100%**

Online Homework: The online homework will be available through Pearson MyLab Math. Online homework is normally due to **11:59pm, every Thursday** (You can access MyLab Math through "Contents" → Pearson MyLab in brightspace).

Hand-graded Homework: Hand-graded homework must be submitted to the **Brightspace: Course Tools → Assignment**. It is **due to 8:00pm every Friday**. You should **always show your work** to receive full credit. **The homework must be readable**. Illegible scribbles will receive no credit from the grader. **No late homework will be accepted**. You can discuss homework problems with your friends. **But when you write your solutions, you must write them using your own words and explanations**. It is best way to learn mathematics.

Midterm exams and Final exam: There will be two mid-term exams (**first midterm exam: 8:00pm – 9:30pm, Oct 2 (Mon)**) and the final exam. There will be **NO make-up exams**. If you have reasonable excuse, I'll give your average of other tests to the missing midterm exam. **The final exam will be a comprehensive exam**.

Important Comments: Class attendance is expected. Reading the sections in the textbook ahead of time is strongly recommended. Check the course webpage in the brightspace often.

Integrity: Academic integrity is always expected for all students in this course. **You are free (even encouraged) to work with other students to solve the homework problems. However, you are required to complete online homework by yourself and write up solutions for hand-graded homework using your own words and explanations**. It is one of the best ways to learn Mathematics. Of course, you are required to do your own work on each exam (although you can prepare with others). In the **tests you can use only scientific calculators. No graphing calculators are allowed**.

Accommodations for students with disabilities: Purdue University strives to make learning experiences accessible to all participants. If you anticipate or experience physical or academic barriers based on disability, you are encouraged to contact the Disability Resource Center at: **drc@purdue.edu or by phone: 765-494-1247**.

If you have been certified by the Disability Resource Center (DRC) as eligible for academic adjustments on exams, any accommodations for extra time for exams will be entered automatically by **Stephanie Foster (foster80@purdue.edu)**.

If you have other questions about exams, please contact Stephanie Foster. In the event that

you are waiting to be certified by the Disability Resource Center we encourage you to review our procedures prior to being certified.

Grading: Students who get at least 97% of the total points in this course are guaranteed an A+, 93% guarantees an A, 90% an A-, 87% a B+, 83% a B, 80% a B-, 77% a C+, 73% a C, 70% a C-, 67% a D+, 63% a D, and 60% a D-. **The grades can be curved according to class average and standard deviation.** For each of these grades, it is possible that at the end of the semester a somewhat lower percentage will be enough to get that grade. Because class average is usually lower than 80.

Campus Emergency Notice: www.purdue.edu/

Fall 2023 academic calendar

Classes begin: Aug 21 (Mon)

Last day to withdraw a course with grade, W: Sep 18

Last day to withdraw a course with W or WF grade: Oct 24

Classes end: Dec 9

Final exam period: Dec 11 – 16

Adding a course: Week 1: No approval required

Weeks 2-9: Approval of academic advisor and instructor

Weeks 10-16: Not permitted

Dropping a course: Weeks 1-2: No approval required; course will not be recorded.

Weeks 3-13: Approval of academic advisor; course will be recorded with grade of W.

Weeks 14-16: Not permitted