

# MATH 266-Sec 325 Spring 2025

**Course:** Ordinary Differential Equations

**CRN**: 22091

Time: MWF 11:30 am - 12:20 pm, Jan 13, 2025 - May 03, 2025

Credit Hours: 3.00

Location: Hampton Hall of Civil Engnrng (HAMP) 3153

**Instructional Modality:** Face to Face

**Instructor:** Yuan GAO

Office hour: Mon 3:30-4:30pm, Wed 10:30-11:30am (Math 410) or other ways via Email appointment

Office Location: Math 410 Email: gao662@purdue.edu

**Office Phone number:** 765-496-0056

TA: TBD, Email:

# **Description:**

Official course description from the university catalog: First order equations, second and n'th order linear equations, series solutions, solution by Laplace transform, systems of linear equations. <u>It is preferable but not required to take MA 26500 either first or concurrently.</u> Not open to students with credit in MA 26200, 27200, 36000, 36100, or 36600.

#### Texts:

1. **Main textbook (Required)**: Edwards, Penney, and Calvis, Differential Equations and Boundary Value Problems, 6th ed. (Pearson)

This course covers Ch1-5, Ch7 of the textbook.

Approximated Schedule: See Course Calendar in Brightspace>Contents

# Scheduled Exams (Location subject to changes):

**02/25,** Tue Exam 1, 6:30-7:30 pm in ELLT 116 (covers Sec 1.1–1.6, 2.1–2.5, 3.1–3.3) **04/08,** Tue Exam 2, 8-9 pm in ELLT 116 (covers Sec 3.4–3.6, 4.1–4.2, 5.1–5.6) Final Exam (two-hour) in the exam week May 5–May 10, TBD

# Homework:

There are 36 **online assignments** using Pearson's MyLab Math. You can access MyLab Math through Brightspace page. Due dates for the assignments are set based on <u>Course Calendar.</u>

There are also **handwritten problems** to be found in MyLab Math (submit via Gradescope). Due dates will be specific on Gradescope based on *Course Calendar*.

Assignment Sheet for the whole semester can be found in Brightspace>Contents

#### **Policy on Late Homework:**

Except in cases of University approved reasons, late homework will not be accepted. At the end of the semester, the 3 lowest online homework scores will be dropped. No handwritten scores will be dropped.

# **Homework Score Appeal:**

If you believe there is a computer error in the grading of your homework problems, please contact your instructor by email.

### Calculators:

Calculators are not allowed on exams. You may use calculators on homework assignments.

#### **Grades:**

Course grades are determined from your overall total score as follows:

Online Homework 22% Written Homework 6% Two midterms @ 18% each Comprehensive Final Exam 36%

The maximum percentages to get each grade are:

97% an A+

93% an A

90% an A-

87% a B+

83% a B

80% a B-

77% a C+

73% a C

13% a C

70% a C-

67% a D+

63% a D

and 60% a D-

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. (In other words, the lowest percentage to get, for example, an A could be lower but will not be higher than 93%.)

### **Policy on Makeup and Accommodated Exams:**

Makeup exams will be given only under circumstances described in and according to the Attendance Policy (see below). Due to the multisection nature of the course, in order to secure the integrity of the exam, no makeup exam is possible before the scheduled date and time of the actual exam. In addition, generally, no makeup exam is possible once the exams are returned to the students (which is typically one week from the exam's date).

For information on exam accommodations for students with disabilities, please visit the Department of Mathematics <u>ADA information page</u> as well as read the section **Accommodations for Students with Disabilities** below. Similar to makeup exams, accommodated exams cannot be taken before the date and time of the actual exam or after the exams are returned to the students.

#### **Important Dates:**

Last day to drop a course without it appearing on record: (no authorization required) <u>Mon, Jan 27</u> Last day to drop a course and receive a W: <u>Fri, Apr 18</u> (advisor approval required) Please see the Purdue University Registration Calendars for other important dates.

# **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, as soon

as possible.

If the Disability Resource Center (DRC) has determined reasonable accommodations that you would like to utilize in this class, you must send your Course Accommodation Letter to the instructor. Instructions on sharing your Course Accommodation Letter can be found by visiting: https://www.purdue.edu/drc/students/course-accommodation-letter.php Additionally, you are strongly encouraged to contact the instructor as soon as possible to discuss implementation of your accommodations.

# **Attendance Policy:**

This course follows Purdue's academic regulations regarding attendance, which states that students are expected to be present for every meeting of the classes in which they are enrolled. When conflicts or absences can be anticipated, such as for many University-sponsored activities and religious observations, the student should inform the instructor of the situation as far in advance as possible. For unanticipated or emergency absences when advance notification to the instructor is not possible, the student should contact the instructor as soon as possible by email or phone. For cases that fall under the University's excused absence regulations, the student or the student's representative should contact or go to the Office of the Dean of Students (ODOS) website to complete appropriate forms for instructor notification. Under academic regulations, excused absences may be granted by ODOS for cases of grief/bereavement, military service, jury duty, parenting leave, or emergent medical care. Absences outside of those covered by the University's excused class absence regulations are at the instructor's discretion. Purdue expects each student to be responsible for class-related work missed due to an unavoidable absence. Students should contact their instructors directly to discuss the absence and opportunity to complete missed coursework. This work may be made up at the discretion of the instructor.

### **Mental Health/Wellness Statement:**

Purdue University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of mental health support, services are available. For help, such individuals should contact <a href="Counseling and Psychological Services">Counseling and Psychological Services</a> (CAPS) at 765-494-6995 during and after hours, on weekends and holidays, or by going to the CAPS office on the second floor of the Purdue University Student Health Center (PUSH) during business hours.

#### **Nondiscrimination Statement:**

Purdue University is committed to maintaining a community which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life. For more information, please see Purdue's full Nondiscrimination Policy Statement.

### **Academic Integrity:**

Academic integrity is one of the highest values that Purdue University holds. Individuals are encouraged to alert university officials to potential breeches of this value by either emailing integrity@purdue.edu or by calling 765-494-8778. While information may be submitted anonymously, the more information that is submitted provides the greatest opportunity for the university to investigate the concern. Purdue prohibits academic dishonesty. According to University policy, cheating, plagiarism, lying, and deceit in any of their diverse forms (such as the use of substitutes for taking examinations, the use of illegal cribs, plagiarism, and copying during examinations) is dishonest and must not be tolerated. Moreover, knowingly to aid, abet, directly or indirectly, other parties in

committing dishonest acts is in itself dishonest. If found guilty of academic dishonesty, possible penalties can range from receiving a zero on the assignment or exam to expulsion from the University. For more details about the Purdue policy on academic dishonesty, see <a href="https://www.purdue.edu/odos/osrr/academic-integrity/">https://www.purdue.edu/odos/osrr/academic-integrity/</a>

# **Commercial Note Taking in Classes:**

Notes taken in class are generally considered to be "derivative works" of the instructor's presentations and materials, and they are thus subject to the instructor's copyright in such presentations and materials. No individual is permitted to sell or otherwise barter notes, either to other students or to any commercial concern, for a course without the express written permission of the course instructor. See University Senate Document 03-9, April 19, 2004.

### **Course and Instructor Evaluations:**

Toward the end of this semester, you will be provided with an opportunity to give feedback on this course and your instructor. Purdue uses an online course evaluation system. You will receive an official email from evaluation administrators with a link to the online evaluation site and will receive a prompt to complete the survey when you login to Brightspace. Your participation is an integral part of this course, and your feedback is vital to improving education at Purdue University. We strongly urge you to participate in the evaluation system.

# **Emergency Preparedness:**

In the event of a major campus emergency or other circumstances beyond the instructor's control, course requirements, deadlines, and grading percentages are subject to changes that may be necessitated by a revised semester calendar. Relevant changes to this course will be posted on the course web page https://www.math.purdue.edu/ma26600.

You are expected to read your @purdue.edu email on a frequent basis.

Purdue's website on <u>Emergency Preparation and Planning</u> covers topics such as Severe Weather Guidance, Emergency Plans, and a place to sign up for the Emergency Warning Notification System. You are encouraged to download and review the Emergency Preparedness for Classrooms document (<u>PDF</u>).