

MA 266 – Ordinary Differential Equations

Course Information

- **MA 266 – Ordinary Differential Equations**
- **MA-26600-OL2 and MA-26600-902**
- **Instructional Modality:**
 - Section 902 is Sync-Online. Live zoom lectures will be MWF @ 10:30am – 11:20am
 - Section OL2 is Async-Online. Pre-recorded lectures will be posted on the Brightspace page
 - To accommodate sickness or any other unforeseen circumstances, students may switch between modalities at any time. Everything (pre-recorded lectures and zoom meetings) will be posted in the same Brightspace page.
- **Meeting day(s) and time:**
 - Live lectures on zoom: MWF @ 10:30am – 11:20am
 - Office hours on zoom:
 - Monday @ 3-4pm
 - Wednesday @ 2-3pm
 - Friday @ 1-2pm
- **Course credit hours:** 3 credit hours
- **Prerequisites:** It is preferable but not required to take MA 26500 either first or concurrently. Not open to students will credit in MA 26200, 27200, 36000, 36100, or 236600.

Instructor Contact Information

Instructor: Dr. Kaitlyn Hood

Email: kthood@purdue.edu

Zoom: link published on Brightspace

Piazza: <https://piazza.com/class/kjk80jyel5i29f>

Notes:

- The best place to ask course content and math related questions is through the Piazza forum. I will be checking Piazza every weekday and responding. Additionally, it has the capability of math typesetting, making communication easier.
- Please reserve email for personal questions (i.e. sickness, accommodations, etc), and include "MA 266" in the subject line.
- I will respond to emails within two business days.

Course Description

This is a first-semester course in differential equations. The main topics covered are First order equations, second and nth order linear equations, series solutions, solution by Laplace transform, systems of linear equations.

Learning Resources, Technology & Texts

Textbook: Differential Equations and Boundary Value Problems, Pearson, 5th Edition, by Edwards, Penney and Calvis.

- We will cover most of chapters 1-5 and 7.
- Please purchase Pearson MyLab Math Access Code for this textbook. Use the link to MyLab Math in Brightspace.
- A digital copy of the textbook will be available in the MyLab Math webpage.
- A Quick Student Guide to MyLab Math is posted in Brightspace.

Course webpage (managed by the Math department):

<https://www.math.purdue.edu/academic/courses/coursepage?subject=MA&course=26600>

Brightspace webpage (managed by me): <https://purdue.brightspace.com/>

Gradescope (for submitting written homework): www.gradescope.com

Piazza (for asking math questions): <https://piazza.com/class/kjk80jyel5i29f>

Dr. Hood's class page (similar to Brightspace but condensed):

https://www.math.purdue.edu/~kthood/MA266_Spring2021.html

Course Schedule

Posted here: https://www.math.purdue.edu/~kthood/docs/MA266_S21/Calendar_MA266_S21.pdf

*Subject to change throughout the semester

This year we will have a modified spring schedule.

- Link to the Purdue [Academic Calendar](#)
- Key University dates for the Spring 2021 semester:
 - Jan. 4 – Academic Year Faculty/Staff First Day
 - Jan. 19 – Classes Begin
 - Feb. 17 – Reading Day
 - March 18 – Reading Day
 - April 13 – Reading Day
 - May 1 – Classes End
 - May 3-8 – Final Exams
 - May 8 – Semester Ends
 - May 11 – Grades Due

Learning Outcomes

Posted here:

https://www.math.purdue.edu/~kthood/docs/MA266_S21/Learning%20Objectives%20for%20MA%20266.pdf

Assignments

Your learning will be assessed through a combination, online homework, written homework, computer projects and exams. Details on these assignments and exams, including a schedule of due dates, rubrics to guide evaluation, and guidelines on discussion participation and evaluation will be posted on Brightspace.

Assignments	Due	Percentage
Online Homework	Saturdays by 11:59pm	25%
Written Homework	Saturdays by 11:59pm	6%
Computer Projects	Throughout the semester	3%
Midterm 1	Feb 26 time TBA*	16.5%
Midterm 2	Apr 9 time TBA*	16.5%
Final Exam	Date TBA	33%
		Total: 100%

- **Online Homework:** The Online Homework is completed through Pearson MyLab Math. The lowest three scores will be dropped.
- **Written Homework:** In addition to online homework, there will be written homework problems assigned each week. All assignments should be submitted to Gradescope. Note that answers to all problems are provided at the end of the book, thus you should always show your work to receive credits. No points will be given if you only write the final answer without showing how you get it. No scores will be dropped.
- **Computer Projects:** There are three computer projects that are assigned in the latter half of the semester. (See the course calendar). These will be submitted online through Gradescope.
- **Midterm 1 and Midterm 2.** The midterm exams will be closed book and closed notes. Tentative dates are listed above. More details will be shared in Brightspace closer to the exam dates.
- **Final exam:** Date to be announced. This will be a two-hour comprehensive common final exam given during exam week (May 3 – May 8). The final exam will be multiple choice. Date and time will be announced later.

Collaboration on Assignments: Collaboration and discussion with peers on the Computer Projects and Homework (both online and written) is permitted within reason. The work you submit should represent your own understanding. However, discussion with peers is a common and effective way to distill and reinforce your knowledge. Make sure that your work reflects your own understanding. Copying another person’s work constitutes academic dishonesty and undermines your own learning progress. Similarly, copying work off of tutoring websites (Chegg, CourseHero, etc) also constitutes academic dishonesty.

Collaboration with peers or people outside the class is prohibited on Midterms and the Final Exam. It will be considered Academic Dishonesty and result in a zero grade on the exam.

Late homework: The lowest three online homework scores will be dropped, but in return, late homework will not be accepted. (Deadlines are set in the West Lafayette, IN time zone.) In the event that an assignment is missed for reasons that are serious, unavoidable, and beyond the student's control, the situation will be handled on an individual basis. Non-medical exceptions will be considered only if I am notified prior to the due date and proper documentation is provided.

Re-grade: If you disagree with the grading on an exam or hand-graded homework, you must provide a written explanation, including your reasons for disagreeing, and resubmit the work for regrading within one week after the work is first returned to the class. For assignments submitted on

Gradescope, please submit your regrade request through Gradescope. (Instructions here: <https://www.youtube.com/watch?v=TOHckI12mh0>)

Make-up policy: Except in unusual circumstances (illness, family emergency, etc., documented), no make-ups will be given on midterms or the final. If you need a make-up exam, you have to talk to me in advance (at least two weeks before the test date).

Attendance Policy during COVID-19

This class has two modalities: Online-Sync (with live zoom lectures MWF @ 10:30am) and Online-Asynch (with prerecorded lectures posted on Brightspace). To accommodate sickness or other unforeseen events, students may switch between modalities at any point during the semester. Students do not need to contact the professor in order to do so because all information will be posted on Brightspace. Students may switch modalities multiple times as necessary. Assignment due dates will remain the same unless the student contacts Dr. Hood with a request for accommodation.

If students feel ill, have any symptoms associated with COVID-19, or suspect they have been exposed to the virus, students should stay home and contact the Protect Purdue Health Center (496-INFO).

In the current context of COVID-19, in-person attendance cannot be a factor in the final grades. However, timely completion of alternative assessments can certainly be part of the final grade. Students need to inform the instructor of any conflict that can be anticipated and will affect the timely submission of an assignment or the ability to take an exam.

Only the instructor can excuse a student from a course requirement or responsibility. When conflicts 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 conflicts, when advance notification to an instructor is not possible, the student should contact the instructor/instructional team as soon as possible by email, through Brightspace, or by phone. In cases of bereavement, quarantine, or isolation, the student or the student's representative should contact the Office of the Dean of Students via email or phone at 765-494-1747. Our course Brightspace includes a link to the Dean of Students under 'Campus Resources.'"

Academic Guidance in the Event a Student is Quarantined/Isolated

If you become quarantined or isolated at any point in time during the semester, in addition to support from the Protect Purdue Health Center, you will also have access to an Academic Case Manager who can provide you academic support during this time. Your Academic Case Manager can be reached at acmq@purdue.edu and will provide you with general guidelines/resources around communicating with your instructors, be available for academic support, and offer suggestions for how to be successful when learning remotely. Importantly, if you find yourself too sick to progress in the course, notify your academic case manager and notify me via email or Brightspace. We will make arrangements based on your particular situation. The Office of the Dean of Students (odos@purdue.edu) is also available to support you should this situation occur.

Classroom Guidance Regarding Protect Purdue

The [Protect Purdue Plan](#), which includes the [Protect Purdue Pledge](#), is campus policy and as such all members of the Purdue community must comply with the required health and safety guidelines. Required behaviors in this class include: staying home and contacting the Protect Purdue Health Center (496-INFO) if you feel ill or know you have been exposed to the virus, wearing a mask [in classrooms and campus building](#), at all times (e.g., no eating/drinking in the classroom), disinfecting desk/workspace prior to and after use, maintaining proper social distancing with peers and instructors (including when entering/exiting classrooms), refraining from moving furniture, avoiding shared use of personal items, maintaining robust hygiene (e.g., handwashing, disposal of tissues) prior to, during and after class, and following all safety directions from the instructor.

Students who are not engaging in these behaviors (e.g., wearing a mask) will be offered the opportunity to comply. If non-compliance continues, possible results include instructors asking the student to leave class and instructors dismissing the whole class. Students who do not comply with the required health behaviors are violating the University Code of Conduct and will be reported to the Dean of Students Office with sanctions ranging from educational requirements to dismissal from the university.

Any student who has substantial reason to believe that another person in a campus room (e.g., classroom) is threatening the safety of others by not complying (e.g., not wearing a mask) may leave the room without consequence. The student is encouraged to report the behavior to and discuss next steps with their instructor. Students also have the option of reporting the behavior to the [Office of the Student Rights and Responsibilities](#). See also [Purdue University Bill of Student Rights](#).

Academic Integrity

Academic integrity is one of the highest values that Purdue University holds. Individuals are encouraged to alert university officials to potential breaches of this value by either emailing integrity@purdue.edu or by calling 765-494-8778. While information may be submitted anonymously, the more information is submitted the greater the opportunity for the university to investigate the concern. More details are available on our course Brightspace table of contents, under University Policies.

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 own 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. More details are available on our course Brightspace table of contents, under University Policies.

Accessibility

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.

In this mathematics course accommodations are managed between the instructor, the student and DRC Testing Center.

If you have been certified by the Disability Resource Center (DRC) as eligible for accommodations, you should contact your instructor to discuss your accommodations as soon as possible. Here are instructions for sending your Course Accessibility Letter to your instructor: <https://www.purdue.edu/drc/students/course-accessibility-letter.php>

Mental Health/Wellness Statement

If you find yourself beginning to feel some stress, anxiety and/or feeling slightly overwhelmed, try [WellTrack](#). Sign in and find information and tools at your fingertips, available to you at any time.

If you need support and information about options and resources, please contact or see the [Office of the Dean of Students](#). Call 765-494-1747. Hours of operation are M-F, 8 am- 5 pm.

If you find yourself struggling to find a healthy balance between academics, social life, stress, etc. sign up for free one-on-one virtual or in-person sessions with a [Purdue Wellness Coach at RecWell](#). Student coaches can help you navigate through barriers and challenges toward your goals throughout the semester. Sign up is completely free and can be done on BoilerConnect. If you have any questions, please contact Purdue Wellness at evans240@purdue.edu.

If you're struggling and need mental health services: 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 [Counseling and Psychological Services \(CAPS\)](#) at 765-494-6995 during and after hours, on weekends and holidays, or by going to the CAPS office of the second floor of the Purdue University Student Health Center (PUSH) during business hours.

Emergency Preparation

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. Relevant changes to this course will be posted onto the course website or can be obtained by contacting the instructors via email. You are expected to read your @purdue.edu email on a frequent basis.

Disclaimer

This syllabus is subject to change. Any changes will be posted in Brightspace.