

MA 16020 Applied Calculus II Fall 2025

COURSE DESCRIPTION: Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems.

PREREQUISITE: Minimum grade of C- in MA16010, MA16100, MA16300, MA16500, MA16700, MA22300, MA22100, or MA23100.

TEXTBOOK: An electronic textbook, including videos, will be available through Achieve. There is a link to the e-book in Brightspace under Contents->Achieve.

HOMEWORK ACCESS: Online homework access will be through Acheive. The homework links can be found in Brighspace under Contents-Achieve. Each set of homework assignments is subdivided into content by exams.

Calculator: Any non-graphing and non-programmable scientific calculator can be used in this course.

Homework: Homework will be assigned daily. There will be **35 assignments** total worth **10 points each**. Two homework scores will be dropped at the end of the course. Each assignment is due at **11:59pm on the day of the next lecture**. Since the homework is available well in advance of due dates, you should take into account any adjustments in your schedule to make sure that all homework is completed before the due date. Extensions will not be given on any homework assignment. Homework is worth 10% of the course grade.

Quizzes: Quizzes will be given in class on a regular basis and are worth 10% of your final grade. A total of 10 quizzes will be given during the semester. No make-up quizzes will be allowed for any reason and students may not take any quizzes early. The lowest 2 quiz grades will be dropped at the end of the course.

EXAMS: There will be three one-hour midterm exams and a comprehensive two-hour final exam given in MA 16020. **All exams must be taken on campus**. The midterms will be worth 100 points each and the final exam will be worth 200 points. All exams will be multiple choice, machine graded exams.

Make sure that you are available on the dates of the exams to take the exams. Make sure to read the exam memo posted on Brightspace for information about each exam. Exam dates are as follows.

Exam 1: Monday, September 15, 6:30-7:30pm, Location TBA

Exam 2: Monday, October 20, 6:30-7:30pm, Location TBA

Exam 3: Monday, November 17, 6:30-7:30pm, Location TBA

Final Exam: TBA

Exam Attendance: Attendance at exams IS REQUIRED at the Purdue, West Lafayette campus (including all students in the Distance Learning section). If you miss an exam for any reason, contact your instructor AND the course coordinator (Dave Norris norris@purdue.edu) immediately and explain why you missed the exam. You should be prepared to present documentation to the course coordinator that supports the reason for your absence. If you contact the course coordinator within 24 hours from the scheduled exam, you may be allowed to take an alternate exam either with or without a 20% penalty, depending on the reason for your absence. If you miss an exam with no valid and documentable reason and you do not contact the course coordinator within 24 hours from the scheduled exam, you will not be allowed to take an alternate exam. Not knowing the correct time, date, or location of the exam is not a valid reason for missing an exam.

Exam Penalties: The exams will all be mutiple choice machine graded the exams. The demographic information on the scantron must be correct in order for your score to be automatically processed. If it is incorrect, there will be a delay in scoring since the exam will have to be retrieved and hand graded. So there will be a 5 point penalty if your PUID is filled in incorrectly, and a 5 point penalty for an incorrect test number.

Exam Conflicts: If you have a direct conflict with another exam, class, or required university activity, contact the course coordinator (Dave Norris, norris@purdue.edu) **at least one week** before the conflict.

You will be asked to provide written verification of the conflict. Clients of the Disability Resources Center with concerns may contact the Undergraduate Services Office coordinator (MATH 630, 765-494-1991).

Discussion Forum: We will use Piazza for online discussion. More details will be provided to you once class starts. This is the place for you to interact with the fellow students and your instructor and get your questions answered. **You are highly encouraged to actively participate in the discussion.**

Math Resource Room: Information about the MRR will be given later in the semester.

GRADES: The course grade will be distributed as follows:

Homework	10%
Quizzes	10%
Exam 1	16%
Exam 2	16%
Exam 3	16%
Final Exam	32%
Total	100%

Final letter grades will be determined using the following grading scale. (Grading scale may be adjusted if needed.)

Average	Grade	Average	Grade
98%-100%	A+	70%-74%	C+
90%-100%	A	65%-69%	C
88%-89%	A-	60%-64%	C-
86%-87%	B+	57%-59%	D+
78%-85%	B	50%-56%	D
75%-77%	B-	0%-49%	F

SECTION CHANGES AND DROPS: In the first week of the semester, you can add, drop, or change sections through MyPurdue. After the first week of classes, students can make course and section changes through the online workflow system. This can be set up by your advisor. No new adds to the course will be accepted after Tuesday, September 2. No changes to the online section can be made after Friday, September 5.

ATTENDANCE POLICIES AND ABSENCES

In the unfortunate event of the loss of a loved one, students should contact the Office of the Dean of Students to request that a notice of his or her leave be sent to instructors. The student will provide documentation of the death or funeral service attended to the ODOS. Given proper documentation, the instructor will excuse the student from class and provide the opportunity to earn equivalent credit and to demonstrate evidence of meeting the learning outcomes for missed assignments or assessments. If the student is not satisfied with the implementation of this policy by a faculty member, he or she is encouraged to contact the Department Head and if necessary, the ODOS, for further review of his or her case. In a case where grades are negatively affected, the student may follow the established grade appeals process.

Grief-Absence Policy for Student (GAPS): If you experience a death of a family member or close friend, notify the Office of Dean of Students at 765-494-1747. Scores for any missed exams under a verified GAPS absence will be prorated (assigned a score based on your average and the class average). See the course coordinator (Dave Norris, MATH 810) for more information.

Military Absence Policy for Students (MAPS): If you are required to complete mandatory military service, notify the Office of Dean of Students at 765-494-1747 to request that a notice of the leave be sent to instructors. See the course coordinator (Dave Norris, MATH 810) for more information.

Medically Excused Absence Policy for Students (MEAPS): Students will be excused, and no penalty will be applied to a student's absence for situations involving hospitalization, emergency department or urgent care visit and be given the opportunity to make up coursework. Students experiencing hospitalization, emergency department or urgent care visits can provide documentation to ODOS who will then assess the student's request for a Medical Excused Absence, and issue notification of the start and end of the absence to the student's instructors. The student should then follow up with the instructor to seek arrangements as needed.

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.

ACCOMMODATIONS AND 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:

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 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 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.

ACADEMIC INTEGRITY: [Purdue's Honor Pledge](#): "As a boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together - we are Purdue."

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.

COURSE EVALUATIONS: At the end of the semester, you will receive an official email from evaluation administrators with a link to online course evaluations. You are strongly encouraged to participate—your feedback is vital to maintaining and improving the quality of education at Purdue University.

CAMPUS EMERGENCY PROCEDURE: 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. Announcements regarding campus emergencies will be sent via course-wide emails and posted on the course web page.

Emergency Preparedness Summary: A document about emergency preparedness can be found in Brightspace. 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 or TAs via email or phone. You are expected to read your @purdue.edu email on a frequent basis.

If an alarm is heard inside a building, immediately evacuate the building. Get a safe distance from the building. Remain outside the building until police, fire, or other emergency response personnel provide additional guidance or tell you it is safe to leave or return to the building. If an alarm is heard outside a building, immediately seek shelter in a safe location within the closest building. These types of alarms may indicate a tornado, a civil disturbance, or release of hazardous materials in the outside air. Remain inside the building until police, fire, or other emergency response personnel provide additional guidance or tell you it is safe to leave. In both cases above, you should seek additional clarifying information by all means possible such as Purdue University home page, email alert, TV, radio, etc.