Ground Rules MA 16600 Analytic Geometry and Calculus II Fall 2024 **CRN:** 32987 Version 2:29pm, Mon 12th Aug, 2024

1 Course description

From the Purdue University catalog: Credit Hours: 4.00. Continuation of MA 16500. Vectors in two and three dimensions. Techniques of integration, infinite series, polar coordinates, surfaces in three dimensions. Not open to students with credit in MA 16200. CTL:IMA 1603 Calculus - Long II Credits: 4.00

2 Learning outcomes

- (1) Apply techniques of integration (integration by parts, trigonometric substitution and partial fractions) to compute areas of planar regions, volumes of solids of revolution and areas of surfaces of revolution, work.
- (2) Apply tests of absolute convergence of series to find the interval of convergence of some power series.
- (3) Find the Taylor and Maclaurin series of some exponential, rational and trigonometric functions.
- (4) Use polar coordinates to make it possible to sketch the graphs of some curves.

3 Meeting days and times

All students in this course will attend the same lecture section: Section 005 at 7:30AM-8:20AM in WALC-1055. The lecturer is Dr. Jakayla Robbins.

In addition, each student will attend exactly one of the following recitation sections. You MUST attend the recitation section that appears on your class schedule. You will NOT receive credit for attending a recitation section that is not on your class schedule.

Section	Meeting Time	Location
	on Thursdays	
006	3:30pm-4:20pm	STON-215
007	4:30pm-5:20pm	STON-215
008	1:30pm-2:20pm	SC-G040
009	2:30pm-3:20pm	STON-215
010	11:30am-12:20pm	SC-G040
011	12:30pm-1:20pm	SC-G040
014	9:30am-10:20am	CL50-125
015	7:30am-8:20am	CL50-125
016	8:30am-9:20am	CL50-125

In this syllabus, your recitation instructor may also be referred to as your teaching assistant or TA.

4 Prerequisites

Prerequisites can be found at at this link.

5 Locating information about the course

You have two courses in Brightspace associated with MA 16600, one associated with the lecture (LEC), and one associated with the recitation (REC). All key information for the course as a whole will be posted in the LEC class in Brightspace.

Dr. Jakayla Robbins: Fall 2024 MA 16600-005 LEC

Warning: There are two very important exceptions. The links to **MyLabMath** and **Gradescope** are located in your REC class in Brightspace. The name of your REC class in Brightspace has the form:

Fall 2024 MA 16600-XXX REC

where XXX is a 3-digit number indicating the section of your recitation. All homework and quizzes are taken in MyLabMath, and you must use the link in your Brightspace REC class to access MyLabMath. All Exam Agreements will be submitted through Gradescope. All completed midterm exams will be returned via Gradescope. You must use the Gradescope link in your Brightspace REC class to access Gradescope. Your Recitation Instructor may also post important announcements in your REC course if they are specific to your recitation class.

6 Office hours and Contacting your instructor and TA

For the detailed information about Contacting your Instructor and Office Hours, see the "Finding Math Help on Campus" module in the Content portion of your Brightspace LEC class.

All emails sent to your instructor and your teaching assistant must:

- (a) use the **subject line: MA 16600-XXX** where XXX is the section number of your recitation section, AND
- (b) come from your **@purdue.edu** email.

7 Structure of the lectures

The lecturer (Dr. Jakayla Robbins) delivers "in-person" lectures MWF at 7:30AM-8:20AM in WALC-1055. Although we do not take attendance during lecture on MWF, understanding the content of each lecture by attending the lecture in person is REQUIRED. The lecturer will not use office hours to re-teach lessons due to unexcused absences.

The lecturer uses Lesson Templates that are posted in Brightspace. Students are **expected to print or download** the lesson template **before each lecture.** The lecturer will not wait for students to copy the portion of the notes that are typed. On the other hand, **questions** related to understanding the content **are encouraged**. Be courageous when you do not understand something. It is likely that others have similar questions.

We will post the completed lecture notes on Brightspace to help students, but copying or printing completed lecture notes is **NOT** a substitute for attending lectures.

8 Structure of recitation

Recitations will be held on Thursdays. Recitations are led by the recitation instructor. The recitation instructor is also called a teaching assistant or a TA. The primary goal of recitation is to help students be successful on the quizzes and tests. Students who do not attend recitation will receive 0 points on any quiz that is due that day unless the student has an excused absence. (See the next section about absences.) Recitation sections are considerably smaller than the lecture section. This allows time for group work and more interaction with the recitation instructor (TA). We encourage you to develop a mathematical community in your recitation section. Research shows that mathematical learning is enhanced when students work together to learn concepts.

9 Attendance

This course follows the University Academic Regulations regarding class attendance, which state that students are expected to be present for every meeting of the classes in which they are enrolled. In the Content portion of Brightspace, there is a "University Policies and Statements" module that includes two links that are relevant to the attendance policies of this class:

- (1) "Academic Regulations: Attendance" This document describes the attendance expectations at Purdue and lists different types of absences that are excused by the university.
- (2) "Office of the Dean of Students: Class Absences" This document describes the types of absence notifications that the ODOS can provide and the procedures students must follow to request that the ODOS absence notification be sent to their instructors.

Under academic regulations, excused absences may be granted by ODOS for cases of grief/bereavement, military service, jury duty, parenting leave, or certain types of medical care. The process for obtaining absence verification from ODOS takes time, so plan ahead whenever possible.

When conflicts or absences can be anticipated for quiz days or exam days, such as for many Universitysponsored activities and religious observations, you should inform your instructor and your teaching assistant via email **at least one week before the absence**. Do not include personal information in the email. Simply state the general reason for the absence (funeral, military service, serious illness, etc.). Your instructor reserves the right to request documentation for absences that cannot be verified by the Office of the Dean of Students (ODOS) or the Office of Institutional Equity (OIE). For unanticipated or emergency absences when advance notification to is not possible, contact your instructor and your teaching assistant as soon as possible by Purdue email. The subject line of your email should be MA 16600-XXX Absence where XXX is the section number of your recitation.

For absences that do not fall under excused absence regulations (see below), this course follows the following procedures:

- 1. Do not come to class if you are feeling seriously ill, but DO email your instructor and your teaching assistant as soon as possible if it is a quiz or and exam day. The subject line of your email should be MA 16600-XXX Absence where XXX is the section number of your recitation. We do not need details about your symptoms. Just let us know you are feeling ill and cannot come to class. If you are chronically absent, your instructor may require you to attend a meeting before considering whether future assignments can be excused.
- 2. Unless it falls under the University excused absence regulations, any work due should be submitted on time via MyLabMath or Gradescope (if an Exam Agreement is due).

More specific information about exam absences can be found in the "Exams" portion of this syllabus.

10 Schedule

You can find the detailed schedule for the lectures, homework assignments, quizzes, and exams in the Course Schedule, which is posted in the "Syllabus and Course Documents" module in the Content portion of your Brightspace LEC class.

11 Textbook and MyLabMath

This course uses the MyLabMath web platform by Pearson. You **must access your MyLabMath** account through your Brightspace REC course. There is a "MyLabMath" module in the Content portion of your Brightspace REC course.

The student must **buy an access code to MyLabMath** in order to complete the homework assignments and quizzes and to access the e-text. For more details on how to buy an access code, we refer the students to "Quick Student Guide to MyLabMath" which is posted in the "Syllabus and Course Documents" module in the Content portion of your Brightspace LEC class.

The textbook for MA 16600 for Fall 2024 is:

Calculus with Early Trancendentals by Briggs, et. al. Pearson, 3rd edition.

All the questions/inquiries about MyLabMath should first be directed to your Recitation Instructor, NOT to your lecturer. Your Recitation Instructor (TA) will contact the instructor if there is a problem they are not able to solve. If you have contacted your Recitation Instructor and believe that your concern was not addressed, you may contact your instructor at that point.

12 Gradescope

We will use Gradescope to collect Exam Agreements and to return midterm exams. You will access Gradescope through the "Gradescope" modules in your Brightspace REC class.

13 Calculators, AI, and other technologies

Calculators may NOT be used on exams. You may use a calculator on homework and quizzes. For example, if a quiz asked you to approximate a definite integral using 10 rectangles, it is completely

appropriate to use a calculator to find the approximation. Some homework and quiz questions may even tell you to use a calculator so that you can round to an appropriate number of digits.

Your instructor will be mindful of the fact that you will not have access to a calculator or any technological device when you are taking exams. Nevertheless, you instructor does expect that you can do basic arithmetic operations involving integers, fractions, and decimals and can find standard values associated with trigonometric functions without help from technology or other sources. Consequently, you should be wise about how much you use a calculator for homework and quizzes. If the problem involves standard operations, I suggest that you do the problem without a calculator so that you can strengthen your calculation muscles.

You may not use AI or any technology on homework or quizzes. Your instructor strongly encourages you to do the homework without help from AI. AI does not always produce correct mathematical answers. Some of the correct solutions that it does produce are more complicated or use tools that we will not be discussing in this course. You may find that you are wasting time trying to understand the solution produced by AI. Furthermore, if you only use it to find the final answer, you are not helping yourself prepare for the exam.

14 Homework

Homework is given as assignments in MyLabMath, corresponding to each lecture. Usually the deadline to turn in the MyLabMath homework is 11:59 PM on the day of the following lecture. (For example, if the material of the homework is discussed on the lecture given on Monday, the deadline for that homework is 11:59 PM of Wednesday of the same week, when the following lecture is given. The specific deadline for each assignment can be found on the MyLabMath. No extension of the deadline is allowed (except under some special circumstances). The two lowest homework scores will be dropped at the end of the semester.

Homework Warnings:

All the questions/inquiries about MyLabMath should first be directed to your Recitation Instructor, NOT to your lecturer. If you think the MyLabMath computer made an error and did not recognize your correct answer as such, please contact your Recitation Instructor initially. The Recitation Instructor will look at your answer, and if it is correct, they will override the computer grading. If you have any other inquiry about the logistics of homework, contact your Recitation Instructor first. This is the job of your Recitation Instructor. Feel free to contact the instructor if your Recitation Instructor has not been able to address your concerns within two business days.

15 Quizzes

Almost every Thursday you are supposed to work on a quiz, which is given as an assignment in MyLabMath, and submit your work online. The material to be covered in each quiz can be found in the Course Schedule. Your Recitation Instructor (TA) will help you with the quiz during the in-person recitation class.

We will take attendance in the Thursday Recitation Class. If you do not attend the Recitation Class fully, then the score of the quiz you submit online will be brought down to 0 manually by your Recitation Instructor. Sleeping through recitation is not attending recitation. If you have a university excused absence on a quiz day, you must notify your recitation instructor via email at least one week before the absence if the absence is anticipated or as soon as possible if the absence is due to an emergency.

Our quizzes are NOT tests, and you are encouraged to discuss the problems with your peer students and with your TA. The quiz will become available at 6:00 AM on each Tuesday (two days before the day of the Recitation Class), and will remain open until 11:59 PM on Thursday (the day of the Recitation Class). The actual time you can work on the quiz is 120 minutes. The lowest quiz score (only one) will be dropped at the end of the semester. This dropped score is built in to accommodate absences that are not excused by the university. Plan to be in recitation and do your best on all of the quizzes. Save the drop for absences that are not excused but could not be avoided.

Quiz Warnings:

- (i) Quiz 1 is exceptional, and does NOT fit into the regular format described above. The deadline for Quiz 1 is 11:59 PM on Thursday, 29 August 2024, the same time when Quiz 2 is due.
- (ii) A quiz does NOT appear in your MyLabMath account until the very day it is assigned, while all the homework assignments are visible in your MyLabMath account from the first day of the semester. The detailed schedule for the quizzes can be found in the Course Schedule which is posted in the "Syllabus and Course Documents" module in the Content portion of your Brightspace LEC class. The fact that you are not able to see a quiz until the day it is assigned can NOT be used as an excuse to skip a quiz.
- (iii) You have an infinite number of attempts allowed to work on a quiz. However, every time you renew your attempt, all the past answers you submitted will be erased and you have to start from scratch.

16 Exams

We will have 3 midterms, and the Final Exam. The exams are common to all the sections. The specific dates of the exams can be found in in the Course Schedule which is posted in the "Syllabus and Course

Documents" module in the Content portion of your Brightspace LEC class. Detailed information about each exam will be posted in the "Exam Information" module in the Content portion of your Brightspace LEC class as the time for each exam gets closer. This detailed information will include an "Exam Agreement" for each exam. The exam agreement must be signed and submitted on Gradescope before each exam. You can access Gradescope in the "Gradescope" module of your Brightspace REC class. Failure to submit an "Exam Agreement" in Gradescope before taking an exam may result in a score of zero on the exam.

Exam attendance is **REQUIRED**. If you miss an exam for any reason, contact your instructor and your teaching assistant **IMMEDIATELY** by email and explain your reason for missing the exam. Be prepared to provide documentation to your instructor justifying your absence. If you contact your instructor within 24 hours of the missed exam, you may be granted the right to take an alternate exam with or without a 15% deduction, depending on the reason for your absence. If you miss an exam for a reason that is not valid, or for a reason that cannot be verified with documentation, or because you failed to contact your instructor within 24 hours of the original exam time, you will not be allowed to take an alternate exam. Failing to know the time, date, or location of an exam is not a valid reason for missing an exam. In order to be able to provide other students with timely feedback, alternate exams must be taken within one week of the original exam date unless the ODOS has set a different timeline (See below).

17 Grading scheme

The course grade will be determined by the **Total Score**, calculated with weights as follows:

Weights for the Total Score

Homework Quizzes 3 Midterm Exams	200 points 100 points $3 \times 100 = 300$ points
Final Exam	200 points
Total Score	800 points

We have 34 MyLabMath homework assignments (two lowest will be dropped) and 11 quizzes (one lowest will be dropped) to be graded. The scores will be re-scaled and calculated to fit into the weights announced above.

Cut-off points

The letter grades will be given according to the following scheme:

A^+	800 - 776
A	775 - 744
A^-	743 - 720
B^+	719 - 696
B	695 - 664
B^-	663 - 640
C^+	639 - 616
C	615 - 584
C^{-}	583 - 560
D^+	559 - 536
D	535 - 504
D-	503 - 480
F	479 or below

NOTE and WARNING:

- 1. At the end of the semester, if the distribution of the letter grades is way off the traditional one, we MAY LOWER the above mentioned cut-off points. We will NEVER RAISE the cut-off points.
- 2. The MyLabMath score display is designed to exclude the past due assignments from the calculation by default, while their scores will be counted as zero at the end of the semester. We will try manually to adjust the scores of the past due assignments to be zero in the middle of the semester. However, we warn strongly that, if you have many past-due assignments, the displayed score of your performance in MyLabMath may be deceptively higher than your actual score.

18 Late registration and/or transfer

If you have not yet registered for the course but intend to, you should ask the TA of the recitation section you are attending to get you a MyLabMath account and you should start submitting the assignments. There is a two-week trial period for the MyLabMath account. After that, you will have to pay the (nonrefundable) access fee.

If you want to transfer from one section to another, you will have to ask the lecturer for permission and notify the TA's (both of the old recitation section and of the new one) of your transfer.

19 Academic adjustments 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 welcome to let us know so that we can discuss options. You are also encouraged to contact the Disability Resource Center by email at drc@purdue.edu or by phone at 765-494-1247.

If you have already been certified for academic adjustments by the Disability Resource Center (DRC) or are awaiting certification, please follow the procedures below for your mathematics course.

Share your Course Accommodation Letter (CAL) with your instructor and teaching assistant; instructions to do this can be found at https://www.purdue.edu/drc/students/course-accommodation-letter.php

For all in-class accommodations, see your instructor after class or during office hours to discuss your accommodations for the current semester. If you have a conflict with office hours, please send your instructor an email with your schedule so that the instructor can find another time to meet with you.

For all exam-related accommodations, Stephanie Foster will email your Purdue email account within the first 2-weeks of class with instructions on how to schedule your accommodated math exams. If you do not receive an email after 2 weeks, first search your email for "foster80" as the email may have gone to spam folder. If you do not have an email from Mrs. Foster, then contact her at foster80@purdue.edu. Math exams will be administered by either the Department of Mathematics or Purdue Testing Services, depending on the type of accommodation required.

20 Important dates

- Tuesday, 27 August: Last day to register without a late fee
- Friday, 30 August: Last day to drop a course assignment without it appearing on record
- Tuesday, 22 October: Last day to add/modify a course with instructor and advisor signatures
- Tuesday, 19 November: Last day to withdraw from a course with a W or WF grade

NOTE: Check the academic calendar for the other important dates.

21 Math Resource Room

The students are encouraged to utilize the Math Resource Room for help. The detailed schedule for the Math Resource Room will be announced in the first week of instruction. A link will be provided in the "Finding Math Help on Campus" module in the Content portion of your Brightspace LEC class.

22 Academic integrity

Research indicates that mathematics is often best learned in community. We encourage students to work together on homework and quiz materials to learn the mathematics, but each student should only submit answers that they understand. All work on exams will be done individually. Students may not use technology, calculators, books, or any aids on exams. Maintaining academic integrity is a community effort. If you witness an incident in which academic integrity is not maintained, please report it to university officials. You can find a link for "Purdue's Student Guide for Academic Integrity" in the "University Policies and Statements" module in the Content portion of your Brightspace LEC class. The procedure for reporting breaches of academic integrity is described in this link.

23 Nondiscrimination

You can find a link for the "Nondiscrimination Policy Statement" in the "University Policies and Statements" module in the Content portion of your Brightspace LEC class.

24 Mental health/wellness

If you find yourself beginning to feel some stress, anxiety and/or feeling slightly overwhelmed, try Therapy Assistance Online (TAO, https://www.purdue.edu/caps/resources/tao.html), a web and app-based mental health resource available courtesy of Purdue Counseling and Psychological Services (CAPS). TAO is available to all students at any time by creating an account on the TAO Connect website (https://us.taoconnect.org/register), or downloading the app from the App Store or Google Play. It offers free, confidential well-being resources through a self-guided program informed by psychotherapy research and strategies that may aid in overcoming anxiety, depression and other concerns. It provides accessible and effective resources including short videos, brief exercises, and self-reflection tools.

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 a.m.- 5 p.m.

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 in West Lafayette with a Purdue Wellness Coach at RecWell

https://www.purdue.edu/recwell/fitness-wellness/wellness/one-on-one-coaching/wellness-coaching.php. Student coaches can help you navigate through barriers and challenges toward your goals throughout the semester. Sign up is free and can be done on BoilerConnect.

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) (https://www.purdue.edu/caps/) at 765-494-6995 during and after hours, on weekends and holidays, or by going to the CAPS offices in West Lafayette or Indianapolis.

25 Emergency preparedness

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 on the Brightspace LEC course or can be obtained by contacting the instructors or TA's via email. You are expected to read your @purdue.edu email on a frequent basis.

A link to Purdue's Information on Emergency Preparation and Planning is located in the "University Policies and Statements" module of your Brightspace LEC course. This website covers topics such as Severe Weather Guidance, Emergency Plans, and a place to sign up for the Emergency Warning Notification System. The first day of class, I will review the **Emergency Preparedness plan** for our specific classroom. Here are some of the highlights.

- For any emergency call or text 911.
- In case of a fire alarm, we will exit through the back of the room and leave the building through the doors on the left.
- The location of our Shelter in Place in the event of a tornado warning is B058 or any of the classrooms surrounding the basement of the building. We will use the grand staircase to go to the basement of the building. Room B058 is on your left at the bottom of that staircase.
- In case of an active threat such as a shooting in which we cannot get away from the threat, we will either shelter in place in our classroom or in B058.
- The location of our Shelter in Place in the event of a hazardous materials release is our classroom. We will shut all doors and windows.