

MA 162: Plane Analytic Geometry And Calculus II

Fall 2024, Purdue University

GENERAL COURSE INFORMATION

Lecture information

SECTION: 100

TIME: MWF 10:30 am

LOCATION: BHEE 129

SECTION: 200

TIME: MWF 3:30 am

LOCATION: LILY 1105

SECTION: 900

TIME: Distance learning

LOCATION: Distance learning

Instructor information

INSTRUCTOR: Shuyi Weng (please call me Shuyi)

EMAIL: weng83@purdue.edu

OFFICE: MA 448

Office hours

Office hours of the instructor are held at the following times and locations:

- Monday @ 2:00–3:20 pm, LILY 3418;
- Friday @ 11:20–12:50 pm, BHEE 129.

Office hours are times when you can meet with the instructor to discuss the material being presented in class or other related issues you have. Course-related discussions include asking for extra help, seeking clarification of material presented in class, and following up on aspects of the class you find compelling. Appointments are not needed, and attendance is not required for office hours.

Recitation sessions

Recitation sessions are held on Tuesdays and Thursdays. Find the location and teaching assistant of your recitation section on the department course page at <https://www.math.purdue.edu/MA162/>.

Course webpages

Most of the information, announcements, and resources about the course should be accessed through the merged Brightspace page (Login: <https://purdue.brightspace.com/>). General course information, including a copy of this syllabus and a list of lecture/recitation sections and instructors, can be found on the department course page at <https://www.math.purdue.edu/MA162/>.

Textbook and MyLab Math

The textbook for this course is:

William Briggs, Lyle Cochran, Bernard Gillett, Eric Schulz, *Calculus: Early Transcendentals*, 3rd edition, Pearson.

You are required to have an access code for the *Pearson MyLab Math* platform to complete online homework assignments. If you were previously enrolled in a calculus course that used the same book, you may already have access. In that case, check the expiration date of your access code and make sure it is no earlier than the end of this semester. A digital version of the textbook is included with MyLab Math. For a detailed instruction on MyLab Math, see the document

Quick Student Guide to MyLabMath

posted on Brightspace and on the department course page.

Daily schedule

A daily schedule is available on the Brightspace page. You may find the lecture topics, quiz schedule, and due dates of homework assignments on the daily schedule.

Learning objectives

By the end of the course, you will be able to

- Interpret length, area, volume, and other physical quantities with integrals;
- Apply integration techniques to compute integrals of elementary functions;
- Analyze the convergence behavior of sequences and series with convergence tests;
- Approximate complicated functions by simpler ones systematically with power series;
- Describe relations between geometric objects using vectors and polar coordinates;
- Construct basic mathematical arguments that apply some of the major theorems in integral calculus, sequences and series.

Math resource room

The teaching assistants will hold their office hours in the *Math Resource Room* (MRR). You may attend any of the scheduled hours in the Math Resource Room. For more details about MRR, you may visit <https://www.math.purdue.edu/academic/courses/helproom.html>.

Supplemental instruction

There are Supplemental Instruction (SI) study sessions available for this course. These study groups are open to anyone enrolled in this course who would like to stay current with the course material and understand the material better. Attendance at these sessions is voluntary, but extremely beneficial for those who attend weekly. Time and location for the study session can be found at <http://www.purdue.edu/si>. Students who attend these interactive sessions will find themselves working with peers as they compare notes, demonstrate and discuss pertinent problems and concepts, and share study and test-taking strategies. Students are asked to arrive with their student ID card, lecture notes, and questions to these informal, peer-led study sessions.

Important dates

- MONDAY, AUGUST 19: First day of class.
- FRIDAY, AUGUST 23: Last day to ADD or MODIFY a course via the Scheduling Assistant.
- FRIDAY, AUGUST 30: Last day to DROP a course via the Scheduling Assistant.
- MONDAY, SEPTEMBER 2: Labor Day, no class.
- FRIDAY, SEPTEMBER 6: Last day to ADD or MODIFY your enrollment of MA 162, including section switches, with instructor approval. Please note that this is a course-specific deadline. Your other courses may have different deadlines for ADD or MODIFY.
- FRIDAY, NOVEMBER 19: Last day to drop the course and receive a W grade with advisor approval.

EXPECTATIONS, ASSESSMENTS, AND GRADING SCHEME

Homework assignments

Homework assignments are administered on Pearson MyLab Math. There are a total of 35 graded homework assignments. These are numbered HW01 through HW35 on MyLab Math. Their due dates are listed in the MyLab Math system and on the daily schedule page on Brightspace.

More details about MyLab Math homework assignments are available in “*How to do homework assignments*” on Brightspace.

Quizzes

There are a total of 21 quizzes during the recitation sessions. Quizzes cover content related to the homework assignment(s) due on the day of the previous recitation session. Please refer to the daily schedule on Brightspace for quiz schedule.

More details about quizzes are available in “*How to take quizzes*” on Brightspace.

Policy on late and missed homework or quizzes

All deadlines of assessments in this course are at 11:59 pm of the specified dates, unless otherwise indicated. Late homework assignments will not be accepted. Make-up quizzes will not be given. At the end of the semester, three (3) lowest homework scores and two (2) lowest quiz scores will be dropped to account for any possible reasons of *missing* individual assessments. Please note that the intention of this policy is not to boost the final average for everyone, but to cover oversight, accidents, conflicts, short-term illness or emergency, and anything else for which you are unable to obtain an absence note from the Dean of Students (ODOS). As a result, we will disregard any requests of extension or exemption due to these aforementioned reasons.

Students who have to miss class for an extended period of time should contact the Office of the Dean of Students (ODOS) and their lecture instructor. With an approval from the ODOS, deadlines of impacted homework assignments may be extended for a reasonable period, and missed quizzes may be exempted from the overall total. Please refer to “*How to request for absence, extensions, or exemption*” on Brightspace for more details.

Section changes

If you switch between recitation sections, it is your responsibility to contact both your previous TA and new TA to ensure that your homework and quiz scores are appropriately copied over.

Exams

There will be three (3) midterm exams in this course. The dates and times for the midterm exams are

- MIDTERM 1: 6:30–7:30 pm, Thursday, September 19
- MIDTERM 2: 8–9 pm, Tuesday, October 22
- MIDTERM 3: 8–9 pm, Tuesday, November 12

All midterm exams are closed-book and technology-free. Questions on midterm exams are either multiple-choice or fill-in-the-blank format. More details of the midterm exams will be announced closer to each exam dates.

In addition, there will be a two-hour final exam during the final exam week. The time and location will be determined by the Office of the Registrar at a later date.

General details about the exams are available in “*How to take exams*” on Brightspace. Specific information about the locations of exams will be updated and announced on Brightspace as we get closer to each respective exam dates.

Syllabus quiz

We have a syllabus quiz for this course administered on Brightspace. The syllabus quiz is intended to

- encourage you to be acquainted with the course policies, and
- familiarize you with using Brightspace.

The questions are straightforward: if you have read the course information and the how-to's in the course content, you should have no difficulty answering them.

Grading

Your final grade will be computed through a combined evaluation of homework assignments, quizzes, and exam scores.

Syllabus quiz	1%
Homework assignments	15%
Quizzes	20%
Midterm 1	13%
Midterm 2	13%
Midterm 3	13%
Final exam	25%

Final letter grades will be determined using the following tentative grading scale.

If your final grade is at least	97	93	90	87	83	80	77	73	70	65	60
Your letter grade will be at least	A+	A	A-	B+	B	B-	C+	C	C-	D+	D

For each column of the table, it is *possible* that a lower final grade could be enough to earn the letter grade at the end of the semester.

Responsible use of technology

Calculators are not allowed on exams or quizzes.

You are allowed to use calculators, computing tools, online resources, and AI tools for other modules of the course, including homework assignments. The use of these technology should mean to

- (in the long term) help you learn the content, and
- (in the short term) help you prepare for the exams,

but NOT to

- (short-sightedly) help you get over an assignment and receive a score that does not reflect your understanding.

Attendance and class participation

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. Attendance will not be recorded, but you are responsible for all information, announcements, course materials, and assessments during lectures and recitations.

Distance learning

If you are enrolled in the distance learning lecture section (Section 900), you do not have in-person lectures to attend. Instead, lecture contents will be delivered to you through recordings available on Brightspace. Your classwork is still subject to the same daily schedule and assessment due dates. All recitation sections are in-person only.

Communication

Due to the large number of students in this course, please take the following steps to contact the instruction team in case you have a question.

- (1) Consult the course information and the how-to's on Brightspace.
- (2) Contact *your* teaching assistant by email to ask your questions.

Your teaching assistant will be able to address most of your questions. If there is an issue which your teaching assistant cannot resolve, *they* will forward your message to the instructor. Do not direct your inquiry to the instructor without going through your teaching assistant first.

For more information about communication, consult “*How to get help with course materials*” and “*How to contact the right person for my inquiry*” on Brightspace.

Our advice to you

We want every single one of you to succeed in this course, and we want to help you as much as possible along the way. However, *you* are the owner of your learning of the materials, so take the initiative to be responsible for your own learning.

- **PREPARE:** Before each class, review materials from the past class, and browse the new materials in the textbook. Bring questions to every class.
- **ENGAGE:** Do not be a passive learner just taking notes in classes. Instead,
 - Stay focused, and pay attention to everything your instructors say/write.
 - Actively think about the questions your instructors posed in class.
 - Look for answers of the questions you brought to class.
 - Ask questions when appropriate. Chances are that other students may have the same questions!
- **CONSOLIDATE:** Review materials on the same day when your memory is still fresh. Do not wait until close to the deadline to rush your learning tasks.
- **COLLABORATE:** Success is not a solo endeavor. You are strongly encouraged to work in groups to study for the course material. You gain valuable skills including how to explain mathematics to others. You also get a support network that can help you learn the material better. By working with different people, you also expose yourself to new perspectives on course material.
- **REACH OUT FOR HELP:** It is perfectly normal to struggle with some of the materials. Reach out for help early and often! Unresolved questions will not resolve themselves, and will likely come back to haunt your future studies. Do not sleep on issues for extended periods of time. Take actions to resolve them before it is too late!

UNIVERSITY POLICIES AND RESOURCES

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 at 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 both your TA and the professor. 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 your TA as soon as possible to discuss implementation of your accommodations. Please note that accommodations can only be implemented after the CAL is received. According to University policy, accommodations are not retroactive.

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 under University Policies.

Nondiscrimination statement

Purdue University is committed to maintaining a community that 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. A hyperlink to Purdues full Nondiscrimination Policy Statement is included in our course Brightspace under University Policies.

Mental health/wellness

- 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 free and can be done on BoilerConnect.
- If youre 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 on the second floor of the Purdue University Student Health Center (PUSH) during business hours. The [CAPS website](#) also offers resources specific to situations such as COVID-19.

Basic needs security

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. There is no appointment needed and Student Support Services is available to serve students 8 a.m.-5 p.m. Monday through Friday. Considering the significant disruptions caused by the current global crisis as it relates to COVID-19, students may submit requests for emergency assistance from the [Critical Need Fund](#).

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 Brightspace page or can be obtained by contacting the instructors or TAs via email or phone. You are expected to check your @purdue.edu email on a frequent basis.

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

During the last two weeks of the semester, you will be provided an opportunity to evaluate this course and your instructor(s) through online course evaluations. On Monday of the 14th week of classes, you will receive an official email from evaluation administrators with a link to the online site. You will have two weeks to complete this evaluation. Your participation in this evaluation is an integral part of this course. Your feedback is vital to improving education at Purdue University. We strongly urge you to participate in the evaluation system.

Guidance on class recordings

This class or portions of this class may be recorded by the instructor for educational purposes. Your instructor will communicate how members of the class can access the recordings. Portions of the course that contain images, questions or commentary/discussion by students will be edited out of any recordings that are saved beyond the current term.