



Syllabus: Math 1152

Calculus II

Spring 2024

Course Structure

Lectures

On Mondays, Wednesdays, and Fridays you will attend lectures in which new topics are presented and fundamental skills are reviewed. Lecture is a time for us to develop and discuss the big-picture ideas and get some practice solving both conceptual and computational problems.

Recitations

On Tuesdays and Thursdays, you will attend recitation on the previous lecture(s). Recitation will be a time for you to practice solving problems given on a recitation worksheet with the cooperation and support of your recitation instructor and peers. This is also where you can most easily ask questions about the course material from lecture, the textbook, or the homework.

Instructor

Your instructors will introduce themselves and post their contact information and office hour details in Carmen. Office hours are times when you can meet with your lecturer or recitation instructor to discuss any questions or concerns you have about the course material or related items. This includes asking for clarifications, questions about a particular problem, and following up on course material and assignments. You may also email your lecturer or recitation instructor with questions about the course but be aware that instructors may have other responsibilities during evenings and weekends and will generally return your email within 1-2 business days.

Course Prerequisites

Mathematics 1151 (with grade C- or better), equivalent transfer credit from another college or university as determined by Math Advising Office (<https://math.osu.edu/undergrad/advising-office>), or Course Code L on the Math Placement Test.

GEN and GEL Information

This mathematics course can be used, depending on your degree program, to satisfy the either new General Education Requirements (GEN) or the Legacy General Education Requirement (GEL). Goals and Outcomes for both GEN and GEL are listed at the end of the syllabus.

Course Description

This course covers applications and techniques of integration, sequences and series, Taylor series, differential equations, parametric equations, and polar coordinates.

Course Learning Objectives:

Upon successful completion of the course, students will be able to:

1. Demonstrate a thorough understanding of calculus II concepts both graphically and analytically.
2. Demonstrate a conceptual understanding and computational proficiency of the course topics.
4. Clearly explain their reasoning both verbally and in writing.
5. Develop patience and persistence when solving problems.
6. Become confident in using mathematics to analyze and solve problems.

Course Materials

Required Text: Ximera Calculus II (free online access through CarmenCanvas)

Required Homework System: Ximera (free online access through CarmenCanvas)

The course uses Ximera for our textbook and online homework system. In all the Ximera assignments, you have as many tries as you need to get these answers correct and there is no penalty for earlier incorrect answers. **Each interaction with Ximera can trigger an update to the Carmen gradebook. It is not finalized until the due date/time. Your score will be updated as you continue to answer more questions. Submissions after that due date/time are not accepted for credit.**

Course Engagement Expectations

Continuous engagement with this course is essential to learning the material. You are expected to check Carmen at least **once every 24 hours on weekdays**. We know that you have commitments outside this class, but to be successful in this course you should plan on working on this course every school day. There are frequent deadlines (given in Carmen and on the Calendar), and you are expected to keep track of all deadlines. You are expected to work ahead of those deadlines whenever possible to prevent last-minute problems. You are expected to attend all lecture and recitation meetings.

Students who need to miss class or who are not able to participate due to serious illness (COVID-19 or other illnesses), are expected to contact the instructor and SLDS as soon as possible to arrange for accommodation. Students in special situations or those requiring specific, long-term or other accommodation should seek support from appropriate university offices including but not limited to: [Student Advocacy](#), [Student Life Disability Services](#) and the [Office of Institutional Equity](#).

In-Person Course Format

Lectures and recitations for this course are in-person. In the case that an instructor is ill or quarantined, class sessions may temporarily switch to online instruction.

Working with Others

We encourage you to work together on the Written Homework and any Ximera assignments. You are free to ask for help, but you are responsible for understanding the material. See the section on Written Homeworks below for details on working with others on written homework assignments.

Exams will ask you to show all relevant work and will often ask you to justify your reasoning, so you will need to make sure that you understand the answers and explanations in your responses on Written Homeworks and Ximera assignments. On Midterms you are to work alone to demonstrate your understanding.

MSLC Free Tutoring Hours

The Math Stat Learning Center (MSLC) offers free drop-in and appointment tutoring. Everyone can benefit from tutoring! The MSLC's drop-in tutor rooms are a great place to work on math homework or study for

exams. Students often use the space like a library with the added benefit of a tutor or peers nearby. Tutoring appointments are weekly one-on-one, 30-minute appointments. You'll work with the same peer tutor each week to provide stability and mentoring-type support. MSLC tutors focus not only on helping you solve the problem at hand, but also work with you to build your understanding and knowledge to prepare you for exams. <https://mslc.osu.edu/tutoring>

Grades and Assessment Information

We use an additive grading system for all assignments. That means each item starts at a score of 0 and you gain points by demonstrating your understanding of the material. Grades are indications of how well the learning objectives were demonstrated across the assessments. For Written Homeworks and Exams, most problems will require that you show all relevant work and appropriate justification for your solutions in order to earn points for your solutions. Failure to show relevant work and include appropriate justification will result in you not earning most (if not all) the points for the given problem. You will be graded both on your ability to solve math problems and your ability to communicate your mathematical reasoning to others. Your solutions should only use concepts and techniques covered in this course (that have been covered prior to the given assignment) or prerequisite courses.

Math 1152 will use a percent-based system to determine the overall course grade. Each type of assessment will count as a certain percent of your final grade. For instance, the final counts as 18% of your final score. If you score a 90% on the final exam, you will earn $.9 * 18 = 16.2\%$ towards your overall course grade. To compute your overall course grade, calculate your score in each category and add together. (Note: Canvas will do this calculation for you, but the Canvas grade **will NOT weight everything correctly until all grades have been entered for the semester**. By default, Carmen Canvas will not include ungraded assignments in your displayed course grade. This means that your grade will not display correctly until all assignments have been entered into Canvas.)

Assignment or category	Percent of Final Grade
Final Exam (Cumulative)	18%
Midterms (3)	30% (approx. 10% each)
Written Homework (5)	35% (approx. 7% each)
Integration Test	5%
Ximera Problem Sets (Homework and Review Assignments)	12% (drop lowest 3)
(BONUS) Ximera Textbook Completion	2% **BONUS**
Total	102%

See the downloadable course calendar for dates for homework and exams.

Grading Scale

A	[93,100]	B-	[80-83]	D+	[67-70]
A-	[90-93]	C+	[77-80]	D	[60-67]
B+	[87-90]	C	[73-77]	E	Below 60
B	[83-87]	C-	[70-73]		

These grading cutoffs will not be raised. Individual assignments, including exams, **will not be curved**. The final grading scheme might be adjusted at the **end of the semester**. Class participation and effort will be important factors in decisions about borderline grades.

The above grading standard will be used to determine your final grade unless adjustments are made at the END of the semester. Neither your lecturers nor your TAs are able to answer *any* questions regarding grade adjustments until after ALL of the course grades have been entered.

Questions about Grades/Grading

Questions about grades, including online homework grades not updating in Carmen, must be reported within one week of the graded assignment being returned for consideration. Grading questions on Midterms and Written Homeworks should be submitted using the Gradescope Regrade Request system. Regrade requests are to be used to bringing grading errors to the attention of your instructor. A regrade request does not mean your grade will change, and decisions regarding regrade requests are final. Regrade requests should not be used to argue over the rubrics that were used to grade a given problem. Please be aware that in evaluating regrade requests we may also take into account whether we discover grading errors that were made in your favor in deciding whether adjustments are needed.

Graded Components

Midterms and Final Exam

Exams are a place for you to demonstrate what you understand about the learning objectives in the course. Work which does not demonstrate an appropriate understanding of the material and the learning objectives is not considered justification. *Answers without written justification do not demonstrate understanding of the material and will therefore receive no credit.*

Math 1152 has **common evening exams** (given outside of the regular class time) that will be given **in-person**. Exams will consist of true/false, multiple choice, short answer, and free-response problems.

Exams will be given on paper. Students will be asked to scan and upload their exam to Gradescope at the end of the exam period using the Gradescope app on their phone or tablet. The paper exams will also be collected. Please note that students are responsible for verifying that your file successfully uploaded and that you uploaded the correct file. Information about Gradescope will be provided in Carmen after the first week of classes

If you have any issue during the exam, please raise your hand and speak with the proctoring instructor(s).

Please note that students will not be allowed to retake any exam after they have begun the original exam.

Exam	Sections (Tentative)	Date and Time	Make-Up
Midterm 1	ARoI - TS	Monday Feb 5, 6:30 PM – 7:45 PM	Tuesday Feb 6, 7:40 AM – 8:55 AM
Midterm 2	PF – CT&LC	Monday Mar 4, 6:30 PM – 7:45 PM	Tuesday Mar 5, 7:40 AM – 8:55 AM
Midterm 3	AaCC - SDE	Monday April 8, 6:30 PM – 7:45 PM	Tuesday April 9, 7:40 AM – 8:55 AM
Final Exam	Cumulative	Thursday April 25, 8:00 PM – 9:45 PM	Friday April 26, 8:00 AM – 9:45 AM

Make-up Policy

Students who have a regularly scheduled course which conflicts with the evening exam times must attend their regularly scheduled class. These students are eligible for and should plan to take a makeup exam. They will need to contact their **lecturer** for permission to take the makeup exam, which are scheduled for the following mornings.

Unless you have a course conflict, everyone is expected to take the exams at the scheduled times. If circumstances arise that prevent you from taking the common evening exam, contact your **lecturer** as soon as possible prior to the exam. Excuses due to illness should be accompanied by a physician's note. Makeup exams for other reasons will only be given in extraordinary circumstances. Documentation of the conflict is required for the makeup exam to be considered for credit.

Make ups for the Integration Test will be available with proper documentation and permission of the **recitation instructor**.

In general, other assignments submitted late will not be accepted for credit. In case of extraordinary circumstances, reach out to your lecturer about Written Homework deadlines or your recitation instructor about deadlines for other online assignments **prior** to when the assignment in question is due. Documentation may be required.

Students should contact their instructor as soon as possible in the event a makeup is needed and should always contact the instructor **before the exam is given**.

Ximera Online Textbook

We use an interactive textbook on Ximera. This textbook has questions to fill in as you read the book. It is strongly recommended that you try to complete the textbook section before lecture on that topic. The textbook sections are not a graded component of this course.

At the end of the semester, students will be rewarded up to 2% bonus on their final course grade proportional to the amount of the online textbook they have completed. Please note that this bonus won't be applied until all assignments (including the final exam) have been entered into Carmen Canvas at the end of the semester. Please note that since the Ximera Textbook sections are bonus, the due dates for these assignments cannot be extended.

Ximera Review Assignments

Review assignments are Ximera assignments that address concepts from pre-calculus and calculus 1 that are relevant for upcoming material. These assignments allow for you to refresh important prerequisite material that

will be assist your understanding of new topics. These assignments will be due by 11:59PM on the date it is due. The due dates will be posted in Carmen and are available on the downloadable calendar.

Ximera Online Homework

The online homework assignments are also conducted through Ximera. Each assignment will cover the new material and may also contain questions covering earlier material. These assignments will be due by 11:59PM on the date it is due. The due dates will be posted in Carmen and are available on the downloadable calendar.

Written Homework

There will be 5 written homework assignments throughout the semester. Written homework will often feature problems in a similar format and of a similar difficulty to exam problems but may also feature problems that are not exam-type problems and may require the use of Desmos or other technology. These written assignments are your opportunity to both practice and to receive feedback on how you write up solutions and explanations to problems before the exams. Late assignments will not be accepted for credit. Written homework submissions will need to be formatted correctly for Gradescope or else a 10-point formatting penalty will be applied.

You are permitted to work in groups of up to three students. You are free to make your own groups, but each group member must be in the same Carmen/Gradescope course. Your group will submit a single file to Gradescope, selecting all group members during the upload. If the uploader does not select the group members, they will not receive credit since there will be no assignment associated to them in Gradescope.

You can discuss Written Homework problems with other Math 1152 students, and you can ask your lecturer and recitation instructor for help during office hours, but ultimately the solutions you submit must be created by the members of your group. While you can talk about the problems with people in other groups, you should not share your written work with people in other groups. All members of the group should attempt to solve all problems. You are NOT to just split the problems up among the group members. You can all work together in real time to solve the problems or you can each solve them and then compare your solutions. You are each responsible for making sure you understand all the solutions your group submits; everyone will need to understand these ideas for the exams. MSLC tutors may help you with the mathematics behind this assignment, but should not solve these particular problems for you. You are not allowed to post these questions online or ask for help from other online sources. Asking for help from online sources or posting these questions online will be considered as academic misconduct.

Integration Test

This will be a timed in-person test covering antiderivatives and definite integrals. The test will be based on material and assignments from the "A Review of Integration" module. Neither calculators nor other computational software are allowed to be used on the test. The Integration Test is worth half as much as a midterm exam, and is 25 minutes long, approximately half as long as a midterm exam.

Students will take the Integration Test during recitation. At the end of the test period, students will scan their test (with proper formatting) and upload it to Gradescope. This will give students valuable preparation for when they need to scan and upload their exams to Gradescope following each midterm.

A Make-up test will be available with proper documentation and permission of the recitation instructor.

Dropped Assignments:

As noted above, your lowest three Ximera assignments scores will be dropped from your grade automatically in the Carmen gradebook. The purpose of these dropped scores is to help mitigate unforeseen technical issues that can arise.

Course Technology

Technology requirements

All students are required to have access to reliable internet. Students will be required to download and upload work for some assessments (written homeworks). This can be done entirely with iPads, but you may also print documents, record your solutions, scan your work, and upload it as a .pdf. It is the student's responsibility to ensure that they can reliably and efficiently submit written documents to Gradescope before each written homework and each exam.

Course Management System

This course uses the Carmen course management system, in conjunction with the Ximera platform. Links to Ximera are available from within the Carmen course. It is your responsibility to check Carmen regularly. Course announcements will be posted there. You should set your course notification settings within Carmen so that you receive emails immediately when an announcement is made. Ximera, Gradescope, and other technologies that are accessed through Carmen will work best if accessed through a browser, not the Canvas app. **We highly recommend that you do NOT use the Canvas app in our course.**

Gradescope

Gradescope will be used to electronically grade and return handwritten assignments (exams and written homeworks) in this course. A link to Gradescope will be posted in Carmen. In the Gradescope section in the "Getting Started" module in Carmen, there will be details on how to upload your work to Gradescope and links to our course policies regarding Gradescope submissions. In particular, we will use template grading for Gradescope. This means that, for a given problem, Gradescope will look in a particular spot on a particular page for your solution. If you do not format your submission correctly, Gradescope will not show the grader your solution. Therefore, it is very important that you format your submission correctly so that the format of your submission mirrors the format of the original assignment document. More details about formatting submissions will be available within Carmen.

Calculator Policy

Calculators will NOT be permitted during exams. Cell phones, iPads, and all other web-enabled and electronic devices are also prohibited during exams.

Technology Problems

It is inevitable that technology will sometimes malfunction. Students are responsible for beginning assignments early enough to have time to ask for help with technical issues. Although reasonable accommodations may be made for students when there are technical issues, the student will be responsible for documenting errors and seeking help in a timely fashion from both technical support and the instructor as needed. No accommodations will be made for students who do not work actively to resolve problems in a timely fashion.

Ximera Troubleshooting Information

Many instructors have worked hard to produce a free, open-source textbook and homework system for Calculus students at OSU. The textbook and Ximera assignments were written to reflect the departmental expectations for written homework and exams. The information below will help you avoid or troubleshoot most technology issues in Ximera.

You must access Ximera through our Canvas page; do not go to the external website or your progress will not be recorded. Make sure to open Canvas in an internet browser; do NOT access Ximera through the Canvas app!

Additionally, please make sure to check out the link below for additional troubleshooting information.

Get Help: <http://go.osu.edu/ximerahelp>

Some common issues - and our course policies to resolve them - are below. In order to resolve these issues, please note that you should **contact your TA** before your lecturer.

- **I didn't finish working on the homework yet, but I have a grade in the Canvas Gradebook.**
The Gradebook syncs with the Ximera servers in real time. Your grade will continually update until the due date for the assignment has passed. You can continue working on the homework, and as you complete more of it, your score will increase.
- **My scores in the Canvas Gradebook are not updating.**
Continue to work on the assignment until the due date. Make sure that your work is being saved on Ximera. After the assignment is due, do the following.
 1. Open the affected Ximera assignment in your Canvas from an internet browser (not the Canvas app).
 2. Click on the big blue box that says “*Certificate”.
 3. Take a screenshot of the screen that shows the name of the assignment, the scores on each problem, and the overall total percentage. Do not click on the link on the bottom of this page; it will not allow us to find the information we need to correct your scores.
 4. Send the screenshot to **your TA** in a message from Canvas. It will be your TA's responsibility to handle these issues this semester.
 5. Screenshots must be sent **within one week of the assignment deadline** to be considered for credit.
- **The Ximera website is down.**
The Ximera website may occasionally become unusable for a half-hour or less. Be sure to begin assignments early enough that these minor downtimes do not affect your ability to complete assignments by the deadline. If Ximera is down for a prolonged period, please contact your lecturer so they can contact the Ximera support team.

Other Course Policies

The following course policies are based on university-wide policies. For additional information, see the “Academic Policies” link in Carmen.

GEN Information

Goals: Successful students will be able to apply quantitative or logical reasoning and/or mathematical/statistical methods to understand and solve problems and will be able to communicate their results.

Expected Learning Outcomes:

Successful students are able to:

- 1.1. Use logical, mathematical, and/or statistical concepts and methods to represent real-world situations.
- 1.2. Use diverse logical, mathematical, and/or statistical approaches, technologies, and tools to communicate about data symbolically, visually, numerically, and verbally.
- 1.3 Draw appropriate inferences from data based on quantitative analysis and/or logical reasoning.

- 1.4. Make and evaluate important assumptions in estimation, modeling, and logical augmentation and/or data analysis.
- 1.5. Evaluate social and ethical implications in mathematical and quantitative reasoning.

GEL Information

Goals: Students develop skills in quantitative literacy and logical reasoning, including the ability to identify valid arguments, and use mathematical models.

Expected Learning Outcomes:

Mathematical or Logical Analysis

1. Students comprehend mathematical concepts and methods adequate to construct valid arguments.
2. Students comprehend mathematical concepts and methods adequate to understand inductive and deductive reasoning
3. Students comprehend mathematical concepts and methods adequate to increase their general problem solving skills.

Health and Safety:

All students, faculty, and staff are required to comply with and stay up to date on all university safety and health guidance (<https://safeandhealthy.osu.edu>).

Academic Misconduct Statement

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute Academic Misconduct.

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules (Faculty Rule 3335-5-48.7) to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me. For additional information, see the Code of Student Conduct at <http://studentlife.osu.edu/csc/>.

Accommodations for accessibility

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's [request process](#), managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, please register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Sexual Misconduct Statement

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <http://titleix.osu.edu> or by contacting the Ohio State Title IX coordinator at titleix@osu.edu

Diversity Statement

The Ohio State University affirms the importance and value of diversity of people and ideas. We believe in creating equitable research opportunities for all students and to providing programs and curricula that allow our students to understand critical societal challenges from diverse perspectives and aspire to use research to promote sustainable solutions for all. We are committed to maintaining an inclusive community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among all members; and encourages each individual to strive to reach their own potential. The Ohio State University does not discriminate on the basis of age, ancestry, color, disability, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, gender, sexual orientation, pregnancy, protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment.

Mental Health Statement

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling [614-292-5766](tel:614-292-5766). CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at [614-292-5766](tel:614-292-5766) and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273-TALK or at suicidepreventionlifeline.org.

Distributing course materials

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course. Course materials which include student data such as class recordings (of either lecture or recitation) are sensitive data and are protected under FERPA (the Family Educational Rights and Privacy Act). They cannot be shared outside this class.

Religious Accommodations

It is Ohio State's policy to reasonably accommodate the sincerely held religious beliefs and practices of all students. The policy permits a student to be absent for up to three days each academic semester for reasons of faith or religious or spiritual belief.

Students planning to use religious beliefs or practices accommodations for course requirements must inform the instructor in writing no later than 14 days after the course begins. The instructor is then responsible for scheduling an alternative time and date for the course requirement, which may be before or after the original time and date of the course requirement. These alternative accommodations will remain confidential. It is the student's responsibility to ensure that all course assignments are completed.

Weather of Other Short-Term Closing

Should in-person classes be canceled, you will be notified as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via Carmen Announcements.