Math 5B Calculus II

#56444 Summer 2023

Welcome to Math 5B at Reedley College! I hope you are excited to start a new semester and I look forward to working with you. Over the next six weeks, I will be available to assist you and provide guidance when you need it. I also encourage you to meet with math tutors from the Math Center and Learning Resource Center at Reedley College. It is common to feel like you are on your own in an online class, but we are all in this together. Our class is a community that's here to support each other's learning and growth, so don't be afraid to ask for help or help others.

About Your Instructor

Instructor: Julie Kehoe

Email: Julie.kehoe@reedleycollege.edu

Communication: There are a variety of ways that you can get in contact with me, however, the Canvas Inbox is the best way to get a response. If you have not heard back from me within two days then contact me again.

I have been teaching math at Reedley College since 2016 but I have lived in the valley all of my life. Originally from Sanger, I was a student at Reedley College before transferring to CSU Fresno where I earned a Bachelor of Arts and Master of Arts in Mathematics. I currently live in Clovis with my husband and three children and I am working towards a Masters degree in Instructional Design and Technology at Arizona State University.

Course Description

Calculus II is a second course in differential and integral calculus of a single variable. Topics include techniques of integration, infinite sequences and series, polar and parametric equations, and applications of integration. PREREQUISITES: Mathematics 5A. ADVISORIES: English 1A or 1AH. (A, CSU-GE, UC, I) (C-ID MATH 220)

Student Learning Outcomes

Upon completion of this course, students will be able to:

1. Evaluate definite and indefinite integrals using various techniques.
2. Apply the use of integrals to problems involving areas and volumes of solids.
3. Determine the convergence of infinite series by using the appropriate test.
4. Differentiate and integrate functions in polar and parametric form.

Course Materials

Textbook

This is a zero textbook cost class! The textbooks and homework system, MyOpenMath, are free and available in our Canvas course. For each section we cover, I will link you directly to relevant textbook materials, videos, and lecture notes in the study materials pages in modules.

Calculators

We will be doing a fair amount of graphing and calculations in this class and a graphing calculator, such as a TI-83 or 84, or its equivalent is highly recommended.

Go to the Calculators page for more information on getting a calculator, as well as free apps and online programs that can substitute for one.

Technical Requirements

- Fairly recent Mac or PC with a current operating system.
- Current browser (Firefox, or Chrome are preferable) do not use internet explorer
- Reliable and easily accessible internet connection, preferably broadband (DSL speeds) -- for viewing online videos

Technical Issues

Canvas Help

Click on the question mark icon at the bottom of the global navigation bar on the far-left sidebar in Canvas to access links to Canvas Guides.

Student Help Desk

Get help with logging in to Canvas, email, WebAdvisor, or other local systems at 559.499.6070

MyOpenMath Help

If you have issues with MyOpenMath please contact me. The Student Help desk probably won't be able to help with this.

Important Dates

- Monday, June 5 - Start of Class
- Sunday, June 11 - Last Day to Drop **without** a 'W'
- Saturday, June 24 - Last Day to Drop with a 'W' (Letter grades assigned if enrolled after this date)
- Tuesday, July 4 - Independence Day (no classes, campus closed)
- Friday, July 14 - End of Class, **Last day to turn in work**

Productive Struggle and the Learning Process

You are all highly capable of learning the material in this course and my goal is to provide you with the materials and support you need to be successful. However, there will be times when you struggle with the concepts in this course. Struggling is normal and an important part of the learning process. But if you find yourself spending a lot of time on something without making any progress, it is a good idea to reach out for help or walk away for a bit. Don't allow yourself to get frustrated or give up entirely. Instead, reach out by sending me a question, posting on the community center discussion boards, meeting with a tutor, or just taking a break for a few hours or a day.

Time management is also important to success. Because this course is 6 weeks, the expected time commitment is about **36 hours per week.** However, we all learn in different ways and at different rates, so your individual time commitment will vary. So, make sure to create daily or weekly goals for yourself and set aside enough time each week to work on this course. This will help to reduce stress and keep you on track to pass the class.

Assignments & Exams

My Grading Philosophy

Your grade in this class will be based entirely on the math skills you learn this semester. Common elements such as **homework, participation, effort, extra credit, and turning assignments in 'on time' will NOT be part of your grade**. This will likely be very different from what you are used to, but the grading system outlined below is designed to be bias-resistant, motivating, and an accurate representation of **what you have learned** in this class.

This may sound a little scary, but keep reading!

Homework Practice

Unit modules have a set of specified skills to learn with study materials, homework, and guided practice to help you master these skills. These assignments are your chance to practice, to make mistakes, to learn. Making mistakes is part

of the process of learning math and is expected. For this reason, there are an unlimited number of attempts on homework questions and **homework scores will NOT be included in your grade. I still expect to see you doing homework regularly, but only as much as you need to learn the concepts.** There are due dates listed for each of these assignments to help keep you on pace to complete the class by the last day, but they will be available for the entirety of the course.

Community Center & Discussion Boards

There will be at least one discussion forum each unit to enable communication between you and other students in the class. Use these forums to connect with me and your classmates, ask questions, and share helpful resources with each other. There will also be some discussion boards to help you understand what is expected to demonstrate skill mastery and for me to get feedback on the rubrics I have created.

Exams & Retakes

Each unit will end with an exam on the skills covered. The exams are your chance to show what you have learned. The work you submit for your exams will be used to determine your grade in the class, so make sure to review the rubric for each skill and show work that clearly explains your solution.

If you have not yet mastered a skill in the exam, that's ok! Retake exams are available as additional opportunities to show you have learned the material. Before attempting a retake exam, you will be expected to study, work on homework, and/or seek out tutoring help. If you show improvement on a retake, then your grade on that skill will be replaced to reflect your best work.

The final exam is the last retake and your last opportunity to demonstrate you have mastered the skills of the course. For any retake exam, including the final exam, you will only need to complete problems that assess the skills you wish to improve your score on. For example, if you only have one skill to improve on, you only have to do one problem on the retake.

Note: Do not log out in the middle of an exam or your score will be automatically recorded. If you run into a problem with this, please contact me right away.

Graded Assignments & Final Grades:

Your grade in this class will be based on your demonstrated level of understanding of each skill assessed in exams and exam retakes.

- Grades based on skills assessed in exams
- 4-point rubric used for each skill
- Overall grade is an average of all skills
- Two retake opportunities for each skill (Exam Retake and Final Exam)

Final grades are calculated by averaging the assessment level of all skills in the course using the following scale:

- **A** - 3.50 - 4.00 (87.5%-100%)
- **B** - 2.75 - 3.49 (68.75%-87.4%)
- **C** - 2.00 - 2.74 (50%-68.74%)
- **D** - 1.25 - 1.99 (31.25%-49.9%)
- **F** - 1.24 and below (below 31.25%)

Grades will be tracked in the Canvas Gradebook. Nongraded assignments like the Homework Practice will also appear in the gradebook, but only to track progress. They are not used to determine your grade in the class.

Progressing Through the Course

Your first assignment in this course is the Syllabus Scavenger Hunt. I want to make sure everyone gets a good start in the class, so if you have not completed it by Tuesday, August 9th, I will be checking in with you on Wednesday. I will be monitoring your progress regularly to ensure you are keeping up with the schedule of assignments and contacting you if you are falling behind. Because this is an online class, participation is determined by assignments completed (graded and nongraded) for the purposes of attendance. **If you have not completed any assignments by Thursday, June 8, you will be considered a no show and dropped from the class.**

I hope that you can see I will do everything I can to support you in being successful not just in this class but in your college and career goals. Because of this, if you begin to fall too far behind and aren't working towards completing the assignments, I will need to make the assumption you do not intend to complete the course. If this happens then I will drop you from the class so that you can take the course again at a time that allows you to be more successful.

Please let me know if you are having trouble completing assignments for any reason. The more I know, the more I can help you. Considering dropping a class? Read this article first.

Support Services

Ways to get help from me!

- **Email or Canvas Messaging** (Don't forget to download the Canvas Student app!)
- **Make a Zoom appointment**
- **Message Instructor in My Open Math -** Found under each homework practice question.

Our Own Embedded Tutor and the Reedley College Math Center

The Math Center is a free tutoring resource available to all Reedley College math students. It is currently offering online tutoring with our own Reedley College tutors and math faculty. Please self-enroll in the Math Center Canvas course to view the schedule for drop-in tutoring, available Monday-Friday. If you want to plan ahead, or need help in the evenings, or on weekends, connect with a Reedley College tutor by making an appointment through Canvas Messaging.

Cameron Garcia and Eli DeAnda are two excellent tutors who have taken my class and are ready to help you this summer.

Click on this link to make an appointment today!

- Online tutoring - May 22 through July 28.
- In person tutoring - Tuesdays and Wednesdays, June 20 through July 26.

Smarthinking Online Tutoring

Smarthinking is a free online tutoring service available in Canvas. Go to the Smarthinking page in the Canvas Week 0 module to learn more!

Accommodations for Students with Disabilities

Disabled Students Programs & Services (DSP&S) is designed to provide specialized services and accommodations that assist students with documented physical, psychological and learning disabilities to reach their maximum potential while achieving their educational goals. Staff specialists interact with all areas of the campus to eliminate physical, academic and attitudinal barriers. Disabled Students Programs & Services takes a personal interest in meeting the special needs of students with disabilities.

If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Academic Honesty

You are a member of an academic community at Reedley College. One of the most important values of an academic community is the balance between the free flow of ideas and the respect for the intellectual property of others. Any test, paper or report submitted by you and that bears your name is presumed to be your own original work. Cheating may include, but is not limited to, using unapproved technology to solve a problem, copying from another's work, supplying one's work to another, using or displaying notes or devices inappropriate to the conditions of the examination, or allowing someone other than the officially enrolled student to represent the student. If you are not clear about the expectations for completing an assignment or taking a test or examination, be sure to seek clarification from your instructor beforehand. Finally, you should keep in mind that as a member of the campus community, you are expected to demonstrate integrity in all of your academic endeavors and will be evaluated on your own merits. The consequences of cheating and academic dishonesty, including a formal discipline file, are simply not worth it.

Tentative Course Schedule

Please note, this schedule is flexible. Assignments can be completed after their due date without any penalty. **Graded assignments are bold**.

Unit 0 Getting Started

- Review Course Materials
- Syllabus Scavenger Hunt
- Getting to Know You Survey
- Class Norms Forum
- Class Introductions

Unit 1 Integration Techniques

- Calculus I Review and 1.1-1.4 Study Materials
- Calculus I Review and 1.1-1.4 Guided Practice and Homework Practice
- Integration by Parts Rubric Discussion Board
- Unit 1 Review
- **Exam 1 - Due June 9**

Unit 2 More Integration Techniques

- Unit 2 Community Center Forum
- 2.1-2.3 Study Materials
- 2.1-2.3 Guided Practice and Homework Practice
- **Exam 2 - Due June 14**

Unit 3 Applications of Integration

- Unit 3 Community Center Forum
- 3.1-3.3 Study Materials
- 3.1-3.3 Guided Practice and Homework Practice
- **Exam 3 - Due June 20**

Unit 4 Physical Applications

- Unit 4 Community Center Forum
- 4.1-4.2 Study Materials

- 4.1-4.2 Guided Practice and Homework Practice
- **Exam 4 - Due June 23**

Unit 5 Sequences & Series

- Unit 5 Community Center Forum
- 5.1-5.3 Study Materials
- 5.1-5.3 Guided Practice and Homework Practice
- **Exam 5 - Due June 28**

Unit 6 Series Convergence Tests

- Unit 6 Community Center Forum
- 6.1-6.3 Study Materials
- 6.1-6.3 Guided Practice and Homework Practice
- **Exam 6 - Due July 5**

Unit 7 Power Series

- Unit 7 Community Center Forum
- 7.1-7.3 Study Materials
- 7.1-7.3 Guided Practice and Homework Practice
- **Exam 7 - Due July 10**

Unit 8 Parametric and Polar Equations

- Unit 8 Community Center Forum
- 8.1-8.3 Study Materials
- 8.1-8.3 Guided Practice and Homework Practice
- **Exam 8 - Due July 13**

Final Exam & Retake Exams - Due July 14