Reedley College

Math 5B Math Analysis II

COURSE SYLLABUS

CONTACT INFORMATION

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Office: FEM -1N

Office Hours: M-W 10-11am

Welcome

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. This is a challenging class for most students and you will likely experience ups and downs throughout the semester. You are not in this alone so take every opportunity to get to know me and other students in class. Persistence, hard work, and a good support system are key. If you put in the time and effort I know you will be able to succeed in this course!

Course Description

This class investigates the applications of integration, many techniques of integration, improper integrals, parametric equations, polar coordinates and functions. Further study involves conic sections, exponential growth/decay models, infinite series including Maclaurin and Taylor Series.

Advisories: ENGL 125 and 126

Prerequisites: Math 5A

Course Objectives

In the process of completing this course, students will:

1. Evaluate definite and indefinite integrals using a variety of integration formulas and techniques;

2. Apply integration to areas and volumes, and other applications such as work or length of a curve;

3. Evaluate improper integrals;

4. Apply convergence tests to sequences and series;

5. Represent functions as power series; and

6. Graph, differentiate and integrate functions in polar and parametric form.

Student Learning Outcomes

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

1. Evaluate definite integrals using the fundamental theorem of calculus and relate definite integrals to areas and Riemann sums.

2. Apply the use of integrals to problems involving volumes of solids, arc length, surface area, and other applications from science and/or engineering.

3. Find antiderivatives using a variety of techniques of integration.

4. Determine the convergence or divergence of infinite series by using appropriate tests and use infinite series to find polynomial representations of transcendental functions.

5. Analyze conic sections and mathematical relationships given in parametric and polar forms.

Course Materials

⇒ Anton, Bivens, and Davis. *Calculus*, 11 ed. Pearson, 2015

⇒ Graphing Calculator (TI 83 or TI 84 recommended)

Recommended Apps/Websites

⇒ Canvas

⇒ Khan Academy

⇒ Desmos
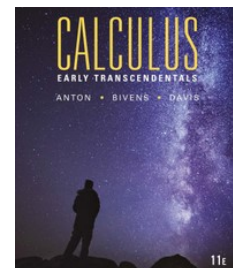
Attendance and Participation

I know you all have busy lives outside of this class but regular class attendance is expected. It is your responsibility to withdraw from the class with Admissions and Records if you find that you can no longer attend or possibly receive an F.

You **may** be dropped for excessive tardiness or after 4 absences.

If you reach 8 absences, **for any reason**, and are failing then you will be dropped from the class.

Being an active participant in class is key to your success. Therefore, If you are tardy, leave early, or leave class and return later, this will affect your attendance count, as will doing unrelated work, homework or using electronic devices during class.

You will be considered late if you arrive after attendance has been taken.

Each tardy is equal to one half of an absence, i.e. 2 tardies = 1 absence

If you do not sign the attendance sheet you will likely be marked absent.

Assignments & Exams

"I have discovered a truly marvelous proof of this, which however the margin is not large enough to contain."
-Pierre de Fermat (referring to his 'last theorem')

In-Class Activities, Worksheets and Practice Exams

You will be working in groups regularly in this class. Worksheet grades will be based on completeness and participation in your group. **Most worksheets missed due to absence can be found on Canvas but participation grades cannot be made up.**

Homework

Homework is assigned on Thursday each week and is due the following Wednesday.

Late Work

Turning an assignment in late for **any reason** will result in a 40% point reduction. No late homework will be accepted after the final exam. Late extra credit assignments will not be accepted.

Exams

There will be three tests and a cumulative final exam in this course. **No make-ups will be allowed for exams.** If absent on the day of an exam, **one** missed exam score will be replaced with your final exam percentage.

Academic Honesty
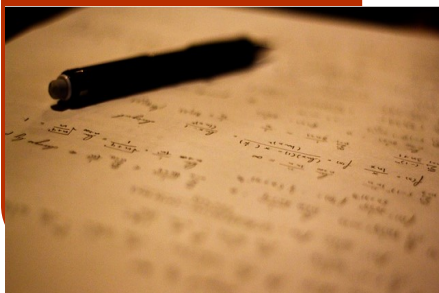
Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors.

Academic dishonesty in any form is a very serious offense and will incur serious consequences, including but not limited to receiving a grade of F on the assignment or in the course. For the college policy on cheating and plagiarism see the college catalog.

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Grading

Grading Scale:

|	
A	89.5% - above
B	79.5%-89.4%
C	69.5%-79.4%
D	59.5%-69.4%
F	59.4% and below

Grading:

50% Exams

20% Homework

15% Final Exam

15% Worksheets, Participation, and Practice Exams

Finding your Grade:

I will be maintaining your grades and attendance on Canvas.

I strongly recommend you check it regularly for accuracy so there are no surprises at the end of the semester.

Tip: Use the 'What if' option to see how future assignment scores will effect your grade.
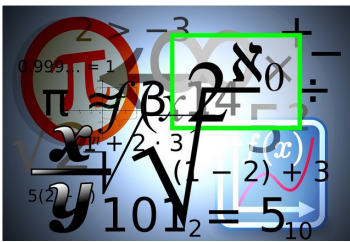
"Do not worry to much about your difficulties in mathematics, I can assure you that mine are still greater." - Albert Einstein

Resources

Other Students in Class

I strongly encourage you to form study groups of 3 to 5 students and work together outside of class. It is more productive and enjoyable to work with others when studying. In addition, it is helpful to have a classmate you can call to get missed work and notes if you are absent.

Your Instructor

I will be happy to help you at the beginning of class or in my office. My office hours are listed at the beginning of this syllabus. If you cannot come during my office hours you can make an appointment to come at a different time. You may also ask questions through email and Canvas.

Math Study Center, FEM 1

The STEM Math Study Center is a free tutoring resource available to all Reedley College math students. The MSC offers drop-in tutoring facilitated by our math faculty and well-qualified student tutors. It also happens to be where my office is located!

Open M-Th 8am-4pm, F 8am-12pm

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 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 tex, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Reedley College
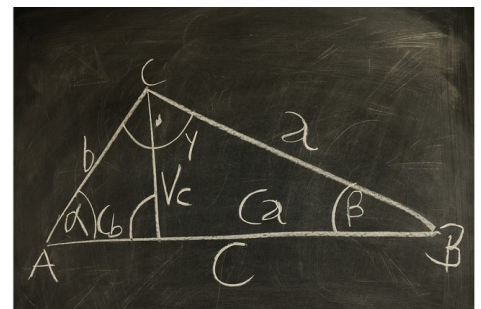
August 13	(M)	Start of Fall 2018 semester
August 13 - October 12	(M-F)	Short-term classes, first nine weeks
August 24	(F)	Last day to drop a Fall 2018 full-term class for full refund
August 31	(F)	Last day to register for a Fall 2018 full-term class in person
August 31	(F)	Last day to drop a Fall 2018 full-term class to avoid a "W" in person
September 2	(SU)	Last day to drop a Fall 2018 full-term class to avoid a "W" on WebAdvisor
September 3	(M)	Labor Day Holiday (no classes held, campus closed)
September 14	(F)	Last day to change a Fall 2018 class to/from Pass/No-Pass grading basis
October 12	(F)	Last Day to drop a full-term class (letter grades assigned after this date)
October 15 - December 14	(M-F)	Short-Term classes, second nine weeks
November 12	(M)	Veterans Day observed (no classes held, campus open)
November 22-23	(Th-F)	Thanksgiving holiday (no classes held, campus closed)
December 10-14	(M-F)	Fall 2018 final exams week
December 14	(F)	End of Fall 2018 semester

Tentative Calendar

AUGUST

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13 Semester Begins	14 Review	15 Review	16 7.1	17	18
19	20 *7.1*	21 7.2	22 7.2	23 7.3	24*	25
26	27 7.3	28 7.4	29 7.4	30 7.5	31*	1

SEPTEMBER

Sun	Mon	Tue	Wed	Thu	Fri	Sat
2	3 No School	4 7.5	5 7.6	6 7.6	7	8
9	10 7.8	11 7.8	12 Review	13 Exam 1	14*	15
16	17 6.1	18 6.2	19 6.2	20 6.3	21	22
23	24 6.3	25 6.3	26 6.3	27 6.4	28	29

OCTOBER

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	1 6.4	2 6.4	3 6.6	4 6.8	5	6
7	8 6.8	9 8.1	10 8.2	11 8.2	12*	13
14	15 Review	16 Review	17 Exam 2	18 9.1	19	20
21	22 9.1	23 9.1	24 9.2	25 9.2	26	27
28	29 9.3	30 9.3	31 9.4			

NOVEMBER

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 9.4	2	3
4	5 9.5	6 9.5	7 9.6	8 9.6	9	10
11	12 9.6	13 Review	14 **Exam 3**	15 9.7	16	17
18	19 9.7	20 9.8	21 9.8	22 No School	23 No School	24
25	26 10.1	27 10.1	28 10.2	29 10.2	30	1

DECEMBER

Sun	Mon	Tue	Wed	Thu	Fri	Sat
2	3 10.3	4 10.3	5 Review	6 Review	7	8
9	10 Final Exam 12-1:50pm	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29