

INSTRUCTOR CONTACT INFORMATION	Location: <a href="https://portal.mypearson.com">https://portal.mypearson.com</a> and <a href="https://blackboard.se.edu">https://blackboard.se.edu</a> Instructor: Dr. Karl Frinkle Office: MTH 112 Office Hours: by appointment only Office Phone: (580)745-2028 E-mail: <a href="mailto:kfrinkle@se.edu">kfrinkle@se.edu</a> Website: <a href="http://homepages.se.edu/kfrinkle">http://homepages.se.edu/kfrinkle</a>
COURSE DESCRIPTION	Differentiation and its applications. Transcendental functions, their derivatives, and their applications. Integration, theory and application will be covered. As a whole, we will cover chapters 1 through 5. You will be required to browse through chapter R on your own. If you find your knowledge of the material in chapter R lacking, you must learn it on your own time.
COURSE PREREQUISITES	MATH 1513 or equivalent.
REQUIRED MATERIALS	You will need an <i>access code</i> for <i>My Math Lab</i> , where all homework and exams are to be completed. The <i>My Math Lab</i> course code for this course is: <b>frinkle03312</b>
	Text: With the access code, you will have access to an HTML eBook of the text.
	Calculator: <i>My Math Lab</i> has a built in calculator, so no calculator is required.
	Access to a smart phone with a camera, or some other type of document imaging device. If you prefer to do your assignments by hand, please write in a dark pen or pencil so that your work can be read from the image you send to me of said work.
	<i>It is extremely important that you obtain course materials before the start date of the course, including the textbook. You do not have to wait until you receive a copy of the syllabus to find out the required book for a given course. You may use the SE Official Bookstore to find the book. Try it now! Go to <a href="http://goo.gl/jRh3v0">goo.gl/jRh3v0</a> (this is a shortened web-address for the SE Bookstore), type in the information for one of your courses, and see the book!</i>
OPTIONAL MATERIALS	Text: <i>Calculus and Its Applications</i> , 11th Ed. by M. Bittinger, et al., ISBN #9780321979391
TECHNOLOGY REQUIREMENTS	Please read the Technical Requirements policy on the Southeastern Distance Education website  <a href="http://homepages.se.edu/blackboard/student-support/browser-recommendations/">http://homepages.se.edu/blackboard/student-support/browser-recommendations/</a>
	In summary, you will need access to a reliable computer with adequate specs and a reliable internet connection, with a backup plan in case you experience technical difficulty. Oftentimes technical problems are browser related, so if this occurs try a different browser. Typically Chrome and Firefox work best BlackBoard.
MINIMUM TECHNICAL SKILLS	Students enrolled in this course will be expected to navigateBlackBoard to obtain course content andcomplete assignments. Students may also be required to use other SE resources such as the SE library. To ensure each student is adequately equipped for these requirements, you have each been

enrolled in a resource course titled Online Student Orientation. There, you will learn to navigate within the BlackBoard folders and modules, as well as use the BlackBoard resources. You will also learn about Respondus and ZOOM. You will complete tutorials on a variety of skills to help you take full advantage of what Blackboard and SE has to offer. If you have trouble loading the tutorials, please review the troubleshooting page upon entering the tutorials module. This course will provide you with the skills needed to succeed in this and other online courses. The Orientation course will take approximately two to four hours to complete in full. You will be required to provide proof of completion of the orientation before gaining access to course work folders. Discovery of falsified credentials (badge) is an integrity violation and will follow SE's academic integrity policy.

**PREREQUISITES KNOWLEDGE** Correct grammar, spelling, and punctuation are necessary in a college course. Therefore, you are encouraged to take advantage of the resource "course" Basics of Language Training (BOLT). These modules are self-paced and will serve as a refresher course for writing. Each online course will require correct usage of grammar and APA format. The Basics of Language Training (BOLT) course contains self-paced modules on APA basic format as well as Citing Sources in APA. You are strongly encouraged to review these modules to be fully prepared for your courses. If you are unable to demonstrate adequate usage of grammar, punctuation, spelling, or APA format, your instructor(s) may require work to be completed in the Basics of Language Training (BOLT) Course. The BOLT course will remain available to students throughout the program so that they may return to it as necessary.

Additionally, the menu of each course will have a link to the Purdue OWL site, which is an excellent resource for quick reference when completing work.

**DEFINITION OF A WEEK** Each week will begin at 12:00am Monday and will end at 11:59pm Sunday. This will be the time frame for which students will be expected to work within a given weeks folder. All assignments will be due at 11:59pm, and the last assignment each week will be due on Sunday. All times will be based on the Central Standard Time zone

**WORK LOAD** The amount of time you will spend in each course will vary from class to class, largely depending on prior education and experience with the topic of the class. Instructors will provide approximate time expectations for each task in the course, but individually, you may spend more or less on any given item depending on your reading speed, the need to re-read content, and how quickly you comprehend the subject and requirements. It is roughly estimated that you will spend an average of 12-15 hours per week in any given course.

**STANDARD GRADING RUBRICS** There are two grading rubrics for this course, one for the weekly written assignments, and one for the weekly discussion boards.

**COURSE POLICIES** **Course Availability** Courses will be made available to students one week (7 days) in advance of the start date.

**Course Content Availability** All homework assignments are made available at the beginning of the semester.

**Late Work** No extra assignments will be given any time during the semester to bring up your grade. When extenuating circumstances arise, the instructor has the right to handle the situation on an individual basis. Excuses such as "The system was down" or "I couldn't get to a computer" are not considered extenuating circumstances. Do not wait until the last minute to complete and/or submit assignments and you will not encounter these types of problems. Similarly, no make up tests will be given. It is your responsibility to meet deadlines and timelines for tests, even if they fall during holidays!

**Attendance:** The Registrar's office defines attendance in online classes as:

- *Stopped Attending:* Students who were participating online but have stopped submitting any assignments, etc. without contacting/making arrangements with you.
- *Never Attended:* Students who never accessed Blackboard to view the course or never completed any assignments that were due for the course. Statistics Tracking in BlackBoard will be utilized in part for determining teacher candidates' accessing of BlackBoard.
- *Excessive Absences:* Students who have submitted some work but are infrequent in their participation or late on assignments – leading to a failing grade.

Regular and routine participation is required to be in attendance for the course. This includes regularly logging in, turning in homework by required dates/times, and participating in discussion forums. **It is imperative that you check the course website every day.** Seven (7) consecutive days of non-participation will result in your access being disabled without warning. Participation, or lack thereof, may also affect your financial aid. Remember, BlackBoard automatically tracks and records every click once you log into a BlackBoard course. BlackBoard administrators can see if and when you logged on, the date and time of day you logged on, and what you accessed once you logged in to the course.

*Registrars definitions above will be used for all reporting purposes, per SE policy.*

**Netiquette** Distance conveys a degree of anonymity, and as a result, many people feel less inhibited in online situations than in their everyday lives. This lessening of inhibitions sometimes leads people to drop their normal standards of decorum when communicating online. Become familiar with the following guidelines regarding both online discussions and email messages. View entirety of policy:

<http://www.se.edu/dept/online-learning/technology/communication-netiquette/>

**Code of Conduct** <http://www.se.edu/dept/student-life/files/2009/10/student-handbook.pdf>

**Academic Calendar** <http://www.se.edu/dept/registrar/calendar/>

**Counseling Center** Any student experiencing mental or emotional issues who desires free, confidential, clinical counseling is encouraged to contact the SE Counseling Center at (580) 745-2988 to schedule an appointment during normal working hours Monday-Friday, 8:00AM to 5:00PM. For after-hours mental health emergencies, please call SE Campus Police at (580) 745-2911 or the Mental Health Crisis Hotline at 1-(800)522-1090.

**Disability Accommodations** Any student needing special accommodations due to a disability should contact the Office of Compliance and Safety, Administration Building, Suite 311 or call (580) 745-3090 (TDD# 7452704). It is the responsibility of each student who anticipates or experiences barriers to their academic experience to make an official request for disability related accommodations in a timely manner.

**BlackBoard Support** Support information can be found on the Southeastern BlackBoard home-page at: <https://blackboard.se.edu/> by clicking on the technical support request or in the lower right hand corner on "Live Chat" between the hours of 7:00am-1:00am CST.

**Equity and Non-Discrimination Statement** Southeastern Oklahoma State University, in compliance with all applicable federal and state laws and regulations, does not discriminate on the basis of race, color, religion, national origin, sex, age, disability, sexual orientation, gender identity, or status as a veteran in any of its policies, practices, procedures, or programs. This includes, but is not limited to: admissions, employment, financial aid, and educational services. Inquiries regarding non-discrimination and equity policies may be directed to: Michael Davis, Director of Compliance

and Safety & Title IX Coordinator, (580) 745-3090, or mdavis@se.edu.

**COURSE FORMAT** **Menu** Each course will utilize a Course Template to accomplish a common look and feel.

1. MyMathLab - This is a link to the book's companion website where you will be doing your section homework assignments and taking your exams.
2. Course Home Page - Here, students may obtain quick information regarding announcements, assignments due, etc.
3. Announcements - Announcements may be used to clarify assignments, make changes in the schedule, provide holistic feedback to the class, etc.
4. Start Here - This section will contain the syllabus, the instructor's contact information, course policies, etc.
5. Course Work - Here students will find a folder for each week of the course. All the content, assignments, etc. will be placed into the appropriate week's folder.
6. Henry G. Bennett Library - This is a link to the SE online library for convenience.
7. Student Tools - Students may access any student tool from this area, including grades. They can also email the instructor or classmates from here.
8. Student Email - All university announcements and other communication with instructors will be sent to student email. This link gives quick convenient access to student email.

**Weekly Folders** There are eight Weekly Folders, located on the BlackBoard Home page tabs, containing all course exercises. Students will collaborate with the instructor and each other via the online tools provided by BlackBoard, including discussion boards. All assignments, instructions, and explanations will be posted to BlackBoard within the corresponding weekly folder. On the front of the folder is the Introduction. It will give you a summary of the contents of the folder as well as an introduction to the subject matter. Assignments, Quizzes, Discussion Boards, and Exams are contained in the sub-folders. The course content will be available from the beginning of the course with due dates listed for each assignment. Please note that early submission of an assignment will not result in the assignment being graded earlier.

**Assignment Schedule** The following table is an abbreviated list of all assignments due each week, along with their point values.

#	Assignment	Assign Date	Due Date	Pts	Week	Objectives Alignment
1	Section 1.1 Homework	June 4th	June 10th	20	1	1
2	Section 1.2 Homework	June 4th	June 10th	20	1	1
3	Section 1.3 Homework	June 4th	June 10th	20	1	1
4	Section 1.4 Homework	June 4th	June 10th	20	1	2
5	Written Assignment #1	June 4th	June 10th	30	1	1
6	Discussion Board #1	June 4th	June 10th	30	1	1, 5
7	Section 1.5 Homework	June 4th	June 17th	20	2	3
8	Section 1.6 Homework	June 4th	June 17th	20	2	3
9	Section 1.7 Homework	June 4th	June 17th	20	2	3
10	Section 1.8 Homework	June 4th	June 17th	20	2	3
11	<b>Chapter 1 Exam</b>	<b>June 4th</b>	<b>June 17th</b>	75	2	1, 2, 3
12	Written Assignment #2	June 4th	June 17th	30	2	3
13	Discussion Board #2	June 4th	June 17th	30	2	3

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14	Section 2.1 Homework	June 4th	June 24th	20	3	4
15	Section 2.2 Homework	June 4th	June 24th	20	3	4
16	Section 2.3 Homework	June 4th	June 24th	20	3	4
17	Section 2.4 Homework	June 4th	June 24th	20	3	4
18	Section 2.5 Homework	June 4th	June 24th	20	3	11
19	Written Assignment #3	June 4th	June 24th	30	3	4
20	Discussion Board #3	June 4th	June 24th	30	3	4
21	Section 2.8 Homework	June 4th	July 1st	20	4	3
22	<b>Chapter 2 Exam</b>	<b>June 4th</b>	<b>July 1st</b>	75	4	3, 4, 11
23	Section 3.1 Homework	June 4th	July 1st	20	4	6
24	Section 3.2 Homework	June 4th	July 1st	20	4	6
25	Section 3.5 Homework	June 4th	July 1st	20	4	6, 11
26	Written Assignment #4	June 4th	July 1st	30	4	3, 6
27	Discussion Board #4	June 4th	July 1st	30	4	3
28	<b>Chapter 3 Exam</b>	<b>June 4th</b>	<b>July 8th</b>	75	5	3, 4, 6, 11
29	Section 4.1 Homework	June 4th	July 8th	20	5	7, 8
30	Section 4.2 Homework	June 4th	July 8th	20	5	9
31	Section 4.3 Homework	June 4th	July 8th	20	5	9
32	Section 4.4 Homework	June 4th	July 8th	20	5	7
33	Written Assignment #5	June 4th	July 8th	30	5	9
34	Discussion Board #5	June 4th	July 8th	30	5	9
35	Section 4.5 Homework	June 4th	July 15th	20	6	7
36	Section 4.6 Homework	June 4th	July 15th	20	6	7
37	Section 4.7 Homework	June 4th	July 15th	20	6	7
38	<b>Chapter 4 Exam</b>	<b>June 4th</b>	<b>July 15th</b>	75	6	7, 8, 9
39	Written Assignment #6	June 4th	July 15th	30	6	8, 9
40	Discussion Board #6	June 4th	July 15th	30	6	7, 8, 9
41	Section 5.1 Homework	June 4th	July 22nd	20	7	11
42	Section 5.3 Homework	June 4th	July 22nd	20	7	7, 8
43	Section 5.6 Homework	June 4th	July 22nd	20	7	11
44	Section 5.7 Homework	June 4th	July 22nd	20	7	8
45	<b>Chapter 5 Exam</b>	<b>June 4th</b>	<b>July 22nd</b>	75	7	7, 8, 11
46	Written Assignment #7	June 4th	July 22nd	30	7	8
47	Discussion Board #7	June 4th	July 22nd	30	7	7, 8, 11
48	Section 6.1 Homework	June 4th	July 27th	20	8	10
49	Section 6.2 Homework	June 4th	July 27th	20	8	10
50	Section 6.3 Homework	June 4th	July 27th	20	8	10
51	<b>Chapter 6 Exam</b>	<b>June 4th</b>	<b>July 27th</b>	75	8	10
52	<b>Final Exam</b>	<b>June 4th</b>	<b>July 27th</b>	180	8	1 - 10
53	Written Assignment #8	June 4th	July 27th	30	8	10
54	Discussion Board #8	June 4th	July 27th	30	8	1-10

#### LEARNING OBJECTIVES

The following objectives will be met in this class:

1. Find and use limits.
2. Find derivatives of simple power, exponential and logarithmic functions.
3. Find derivatives of more complex functions using the product rule, quotient rule, chain rule or the method of implicit differentiation.
4. Use the first, second and third derivatives to solve extreme value problems and analyze concavity.
5. Find the equation of a line tangent to a graph.

6. Find the derivatives of the exponential and logarithmic functions.
7. Find antiderivatives of power and exponential functions.
8. Use antiderivatives to solve initial value problems.
9. Use antiderivatives and the Fundamental Theorem of Calculus to solve area problems.
10. Find partial derivatives.
11. Solve problems in business and the sciences by using derivatives and/or integrals.

WEEKLY MODULE LEARNING OBJECTIVES    The following is a list of the weekly desired learning outcomes:

- Week 1 - This week students will learn the algebraic and geometric definitions of a limit, and then use this definition to compute derivatives.  
(See Course Learning Objectives 1, 2, and 5)
- Week 2 - Students will be able to use differentiation rules to compute the derivatives of more complicated functions by the end of this week.  
(See Course Learning Objectives 3)
- Week 3 - Students will apply properties of derivatives to help graph functions. Students will be able to use derivatives to solve maximum-minimum problems in business, economics, and other applications.  
(See Course Learning Objectives 4 and 11)
- Week 4 - Students will learn how to differentiate implicitly defined functions, as well as how to take the derivative of the exponential and logarithmic functions.  
(See Course Learning Objectives 3, 6, and 11)
- Week 5 - Students will learn about antidifferentiation, the Fundamental Theorem of Calculus and how to apply it.  
(See Course Learning Objectives 7, 8, and 9)
- Week 6 - By the end of this week, the various methods of integration will be mastered by the students, and students will also be able to look up integral types in tables to find antiderivatives.  
(See Course Learning Objectives 7, 8, and 9)
- Week 7 - Applications of integration to business, improper integrals and differential equations will be learned this week.  
(See Course Learning Objectives 7, 8, and 11)
- Week 8 - Functions of several variables are the topic this week, students will be able to compute partial derivatives and use this concept to maximize and minimize functions.  
(See Course Learning Objectives 10)

GRADING POLICY    Each activity will incur points. Homework assignments on *My Math Lab* are worth 20 points each, and there are 31 homework assignments. At the end of each chapter, there will be a test, each of which will be worth 75 points. The cumulative final will be worth 180 points. Besides homework and exams through *My Math Lab*, you will be required to participate in graded online discussions, and to hand in written assignments. There will be one of each of these two types of assignments per week, each being worth 30 points.

Grade Distribution Per Type of Assignment

type	amounts	points	total	percent
homework	31	20	620	35.84%
exams	6	75	525	30.35%
final exam	1	180	180	10.41%
discussion boards	8	30	240	13.87%
written assignments	8	30	240	13.87%

Rounding to the next letter grade is not automatic and will be at the discretion of the instructor. The grading scale is as follows:

Letter Grade	Percentage Range	Points Range
A	90-100 %	1557-1730
B	80-89 %	1384-1556
C	70-79 %	1211-1383
D	60-69 %	1038-1210
F	0-59 %	0-1037

INSTRUCTOR  
FEEDBACK

**Expectations of Instructor and Students:** Students should expect a timely response to email questions and prompt grading and posting of assignments. Unless an announcement was posted indicating my lack of availability, you should receive a response to your email within 24 hours. If you haven't received a response within 24 hours, please email again just in case I overlooked it. Grading and posting of scores for all assignments for each week will be completed before the next week's assignment are due. Usually grades are entered into BlackBoard within 36 hours of the due date.

**Other Policies:** The instructor reserves the right to make adjustments to the syllabus and/or grading policy as needed in order to meet the instructional needs and goals of the class. Students will be notified of any adjustments to the syllabus.

COURSE  
EVALUATIONS

All students are asked to complete an anonymous evaluation of this course. A link to the course evaluation will be provided in Blackboard/Announcements during the last week of the course.