

# **Differential Calculus**

MTH 251 Summer 2021 CRN: 13662

Zoom Class Times: Monday through Thursday Class Location: Google Classroom/Moodle/Zoom

9:00 - 11:20 am Office: WOH-101

Instructor: Sheri W. Rogers Phone: 541.917.4756

Zoom Office Hours: <u>View appointment calendar</u> Email: <u>sheri.rogers@linnbenton.edu</u>

to select a time; or email for an appt.

### **Required Course Materials:**

Regular access to a computer and the internet. <u>Google Classroom</u>: wakmnxo

- Web-Camera for Testing and Class Participation
- Paid Access to <u>Achieve online homework with e-book Course ID</u>: go2gc9
- A scientific calculator or graphing calculator that does not have a symbolic manipulator. The TI-36X-Pro or TI-84 are recommended.
- Ability to scan documents or create pdf documents for uploading work. Free apps for phones work fine. (Cam Scanner, for example.)

**Course Description:** The first course in the calculus sequence for students majoring in mathematics, science and engineering. Limits and derivatives are approached using graphical, numeric, and symbolic methods. Linear approximations, related rates, curve sketching and optimization are among the applications of differentiation covered in this course. **Prerequisite:** MTH 112 Trigonometry or equivalent with a grade of "C" or better.

Student Learning Outcomes: Upon completion of the course, the student will be able to:

- 1. Calculate, interpret and communicate the concepts of limits and derivatives.
- 2. Recognize when and how to apply calculus tools to solve problems in business, the sciences, and engineering.
- 3. Connect the graphical behavior, numerical patterns and symbolic representation of functions and their derivatives.

**Grading Policy:** Your grade in this class is weighted based on the following:

Online Homework - Achieve	20%
Weekly Class Work/Quizzes	20%
Tests (2 @ 15% each)	30%
Project	10%
Final Exam	20%

Scale: 90%-100% A 80%-89% B 70%-79% C 60%-69% D

0 – 59% F All grades will be posted in the gradebook on Google Classroom.

A grade of Incomplete may be assigned at the discretion of the instructor under special circumstances. The student must have completed the majority of the course, been in regular attendance and passing the course prior to the "special circumstance."

We will be using <u>Google Classroom</u> in conjunction with <u>Macmillan's Achieve Website</u> for this course. Each week you will have several items on Google Classroom to complete in addition to your Achieve pre-class and homework. You will need to <u>log into Google Classroom several times each week</u> to participate in the course activities and download Class Work. The <u>Moodle</u> site for this course will be used for monitored testing and posting course links.

Online Homework: There are homework exercises assigned for each section we cover. This is your opportunity to practice and learn the material. You will have 5 attempts on each question. Achieve Homework should be completed by the due dates on the Macmillan website. Assignments not opened prior to the relevant test will have a zero score. Problems in open assignments completed after the due date receive a 3% penalty each day past the due date.

# **Project:**

 The project will include an application of the material for the course. Specific guidelines for the project will be given and explained when the appropriate material has been covered in the course.

### Weekly class work/Quizzes:

- These are activities or quizzes that are given and completed the same week the material is covered. Typically you will work in small groups during class time, putting what you just learned into immediate practice. Each person should submit their own written work in a single pdf file on Google Classroom.
- All written assignments that are completed outside of class are due at 11:59 p.m. on Friday of the week it was assigned. Late assignments will not be accepted after <u>Sunday following the due date</u>. Late work will receive a 20 percentage point penalty. It is important that you seek out help with assignments *before* the date they are due.
- Weekly quizzes over previous material will be announced ahead of time and completed during class.

Please be prepared to upload your completed written work as a pdf file. Please be sure items are numbered and pages are in order. One single combined document for each assignment, please.

## Tests:

- Tests (2) will have a 2-hour time limit and must be submitted at the end of class on the scheduled day.
   No retakes for these tests. Students will immediately submit their scratch work as a pdf file on Google Classroom in order to receive credit.
- The *tentative* test dates are listed on the course calendar. If you have been missing class prior to a test, it is your responsibility to confirm the date of the test as it may change.

  Testing will be through Moodle:
- Moodle Directions: Respondus Lockdown Browser and Monitor
- Video: Introduction to Respondus

**Attendance:** I will monitor your participation and attendance through your participation during Zoom Classes, your Achieve log-in record, your timely completion of online homework and written assignments. *Attendance, effort and attitude will be noted by the instructor and may be used to help determine "borderline" grades.* 

**HELP!** If you have questions, PLEASE ask!

- I have scheduled Zoom office hours when you can drop in:
  - View available times on this link.
- Email me for a scheduled Zoom appointment <u>rogerss@linnbenton.edu</u>
- Visit my <u>instructor website</u>, Google Classroom and <u>Moodle</u> for helpful links to class notes, videos, Zoom links
- The Math Desk WILL be operating Summer Term to support students working remotely via Zoom and Discord, with drop-in help available during these hours:
  - Monday Friday: 9 am 7 pm; Sat. 11 am 4 pm; Sun 11 am 3 pm
  - Zoom: Math Support Zoom Room
  - Learning Center Discord Math
  - ❖ Email: mathdesk@linnbenton.edu
- The URL for the Learning Center Remote Resources site is <a href="https://www.linnbenton.edu/student-services/library-tutoring-testing/learning-center/index.php">https://www.linnbenton.edu/student-services/library-tutoring-testing/learning-center/index.php</a> This will have all relevant Zoom meeting links, hours, and updated information.
- Form a study group: Your classmates are important resources for understanding and completing the
  homework. You gain a deeper understanding of mathematical concepts when you express them in
  your own words and explain them to someone else. It is <u>strongly recommended</u> that you study
  together with other students in small groups. The most successful calculus students form study groups
  early.

#### **Expectations:**

- I expect that my students will be involved in and working on this class several times a week. This includes asking questions and participating in group discussions, watching videos, etc.
- Spend at least 15-20 hours per week working on this class.
- You should log into Zoom meetings prepared (this means you should have your notebook, tablet/laptop, class work, webcam on, etc.).
- I expect you will be respectful of everyone in the class, in word as well as behavior. Discussions should be respectful and supportive of the success of everyone in the class.

**Academic Honesty:** I assume that you are ethical and honest. However, if there is an incident of academic dishonesty (cheating), you will receive a score of zero for that test/assignment and the incident will be reported to the college administration for possible further disciplinary action. If there is a second offense, you will receive a grade of F for the course and the incident will be reported to the college administration with a recommendation for disciplinary action.

**Special Circumstances:** LBCC is committed to inclusiveness and equal access to higher education. If you have approved accommodations through the Center for Accessibility Resources (CFAR) and would like to use your accommodations in the class, please talk to your instructor as soon as possible to discuss your needs. If you believe you may need accommodations but are not yet registered with CFAR, please visit the <u>CFAR</u> <u>Website</u> for steps on how to apply for services or call 541-917-4789.

### **Nondiscrimination Statement:**

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our <u>Board Policies and Administrative Rules</u>. Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806. To report: <u>linnbenton-advocate.symplicity.com/public report</u>.

## The instructor reserves the right to make changes to the syllabus as necessary.

## Specific Week 1 Requirements to stay enrolled in this class:

## <u>Visit Google Classroom for this Course</u>

- 1. Download and read the course syllabus.
- 2. Complete the Syllabus Search Activity. Submit your assignment on <u>Google Classroom</u> by 11:59 p.m. Wednesday, June 30, 2021.
- 3. Use Temporary free or paid access code to log into <u>Achieve</u> and enter your **LBCC email** for yourself. **Course ID:** go2gc9
- 4. Complete the Orientation and Training Assignments on Achieve. (Due Wednesday, June 30th.)
- 5. Attend or watch Zoom Class meetings. Monday through Thursday, 9:00 am 11:20 am
- 6. Complete the Week 1 Class Work by 11:59 p.m. Friday, July 2nd.
- 7. Complete Achieve homework for Sections 2.1 2.2 and 2.3.